



**Seattle Public Utilities
Solid Waste Fund
2013-2016 Rate Study**

June 2012

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I. EXECUTIVE SUMMARY

The Solid Waste Utility provides curbside garbage, food and yard waste (compost or organics), and recycling services to Seattle residents and businesses through contracts with private haulers. The Utility also operates two transfer stations in Seattle that handle and transport the solid waste collected within Seattle and provide residents with a place to “self haul” their solid waste. Solid waste services are supported almost entirely by utility rate revenue.

Solid waste rates were last increased on January 1, 2012 by an average of 3.5 percent. Key elements of this rate study include:

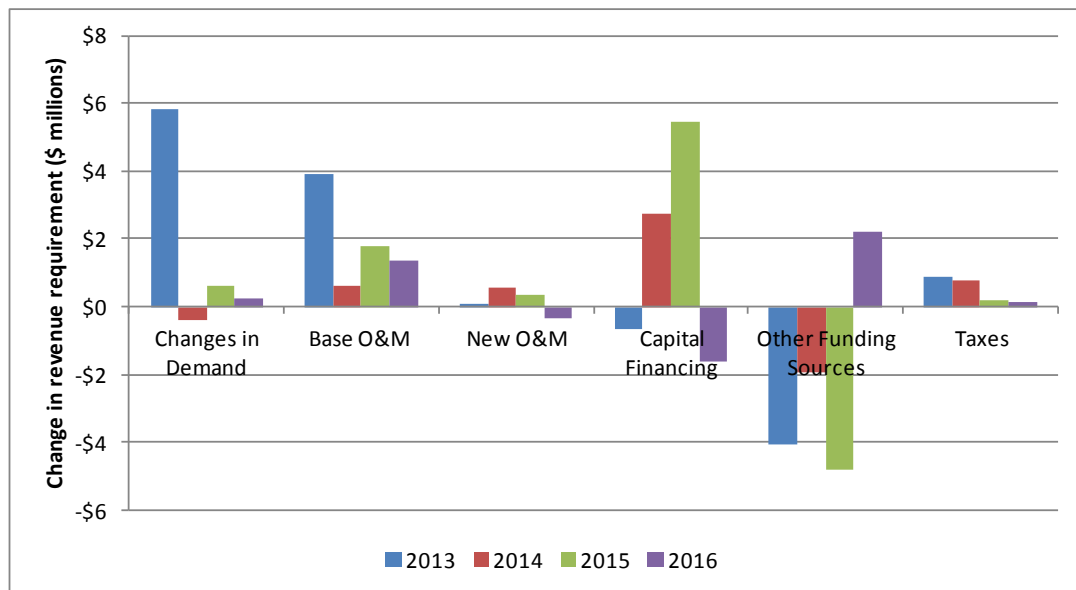
- A longer rate cycle to improve rate predictability, this study proposes a four-year rate cycle (2013 to 2016) versus the two-year cycles typically proposed in the past.
- A pass-through mechanism for inflationary increases to solid waste contract payments intended to mitigate the risk of forecasting externally-imposed increases to the Solid Waste Fund’s (SWF) major expense component over a longer rate cycle.
- An April 1 effective date for rates. Pass-through increases would be effective on April 1 of each year in tandem with inflationary adjustments to contractor rates. To maintain simplicity, the same effective date would apply to increases in base rates proposed under this study.
- Impacts of the implementation of the Solid Waste Facilities Master Plan on operating expense, capital financing expense, and financial performance.
 - The opening of the new ***South Transfer Station (STS)*** in 2012 increases both operations and maintenance (O&M) expense and depreciation throughout the proposed rate period. The increase in depreciation, a non-cash expense, puts significant pressure on net income in 2013. Thus, SPU made a policy decision to meet the positive net income target over a two year period, thus smoothing the impact on rates as well.
 - ***Construction of the new North Transfer Station (NTS)*** will ramp up throughout the rate period, with completion expected in early 2016, increasing capital financing expense. During the construction of the NTS, both self-haul and contractor traffic will be diverted to the STS, raising operational expense.

Following is a discussion of rate drivers, proposed increases and bill impacts, expected financial performance, and the proposed pass-through mechanism. **All rates, bills and financial data in this proposal assume no inflationary increases to contract expense.** Adjustments to rates for inflationary increases to contract expense will be adopted separately through proposed annual pass-through legislation, with the first pass-through increase effective on April 1, 2013.

Rate Drivers

Figure 1-1 breaks down the drivers of the rate increase by year followed by an overview of individual drivers. Chapter III provides a more detail description of revenue requirement components.

**Figure I-1
 Solid Waste Fund Rate Drivers**



Change in Demand Forecast

Customer counts, tons and subscription levels affect revenues, costs and the required change in rates. For example, lower tonnages reduce costs in some cases, but also reduce the number of units to which the costs are allocated. The exact impact on rates depends on the relative changes in cost and revenue. The change in the demand forecast from what was assumed in 2012 rates is a significant rate driver for 2013. Demand has minimal impact on the rate increase in the out years, once the 2013 baseline is reset.

Operations and Maintenance (O&M)

Base O&M

Increases to base O&M in 2013 are primarily due to inflationary increases from 2012 Adopted Budget amounts. Non-inflationary increases between non-contract base spending used to set 2012 rates and the 2012 Adopted Budget are substantially offset by proposed 2013 spending reductions. Inflation is the sole driver of non-contract base increases in the out years, offset in part by declining contract expense.

As inflationary increases to contract expense are not factored into this proposal, variations in contract expense are due to projected changes in tonnage and subscription levels, with the exception of 2013. Higher than projected inflationary adjustments to 2012 contract rates impact base 2013 contract expense, despite no additional increases assumed for 2013.

New O&M

New transfer station requirements drive increases to O&M spending. There is a temporary increase to expense between 2014 and 2016 for contractually-required increases in contractor payments for the diversion of truck traffic to the STS while the NTS is under construction. Increased costs required for the operation of the STS are offset by other savings in 2013, but then represent a net increase in expense beginning in 2014.

Capital Financing

Capital financing expense is a major rates driver in 2014 and 2015 due to increases in both cash and debt financing for the construction of the North Transfer Station. 2013 capital financing expense is actually lower than that used to set 2012 rates which assumed a significantly larger bond issue in 2011 than actually occurred.

Other Funding Sources

Other funding sources include tonnage tax revenues, interest income, grants, reimbursements, recycling processing revenues, garbage extras, use of cash balances, and other miscellaneous non-rates revenues. A net increase in other funding sources and increasing use of cash reserves between 2014 and 2015, reduce the amount of revenue to be recovered through rates in those years. Other funding sources decline in 2016, primarily due to the use of less cash in that year than in 2015 when reserves are drawn down by \$4.0 million to reduce the size of a revenue bond issue.

Taxes

Taxes include State and City taxes on SWF revenues and tonnage (transfer) taxes on garbage tons transferred by SPU within the City. City and State revenue taxes increase proportionally with increased revenues. City tonnage taxes increase through 2014 as a result of adopted annual increases in the tax rate. As the tonnage tax rate is not expected to be increased, declining tonnage into the future will reduce tonnage tax expense through 2016.

Rate, Bill, and Financial Performance Impacts

Table I-1 presents the change in the revenue requirement and the monthly impact of proposed rate increases on typical residential can customers, a selection of dumpster customers, and self-haul customers. While the rates revenue requirement increases by only \$0.2 million in 2013, a larger rate increase is needed to make up for lower demand than assumed when rates were last set for 2012 and to adjust for lower revenues during the first three months of the year prior to new rates taking effect on April 1, 2013.

With the exception of self-haul rates and limited special charges, universal rate increases will apply to all base commercial and residential rates, with rates increasing by 4.6 percent in 2013, 2.2 percent in 2014, 2.6 percent in 2015, and 1.6 percent in 2016. Base self haul rates will remain flat throughout the rate period. These base rate increases exclude the impacts of the contract expense pass-throughs discussed below which will be adopted annually via a separate ordinance.¹

Table I-1
Proposed Solid Waste System Revenue Requirement and Bill Impacts

	2013 Proposed	Change from 2012	2014 Proposed	Change from 2013	2015 Proposed	Change from	2016 Proposed	Change from 2015
Rate Revenue Requirement (\$M)	\$159.89	\$0.15	\$162.61	\$2.72	\$165.60	\$2.99	\$167.33	\$1.73
Typical Bills								
Single Family (32G Can & 96G Org)	\$38.70	\$1.70	\$39.55	\$0.85	\$40.55	\$1.00	\$41.20	\$0.65
Apartment Building	\$297.43	\$12.87	\$304.36	\$6.93	\$311.92	\$7.56	\$317.18	\$5.26
Small Commercial	\$393.91	\$17.19	\$403.07	\$9.16	\$412.93	\$9.86	\$419.61	\$6.68
Large Commercial	\$1,136.08	\$50.10	\$1,160.82	\$24.75	\$1,191.03	\$30.21	\$1,209.84	\$18.80
Self Haul per ton	\$145.00	\$0.00	\$145.00	\$0.00	\$145.00	\$0.00	\$145.00	\$0.00

Financial performance of the Solid Waste Fund (SWF) was generally strong in 2011. In 2012 the fund is expected to have strong liquidity and debt service coverage but not meet net income due to shortfalls in service revenues related to lower demand than was assumed when 2012 rates were set. Under this rate study, SPU made a policy decision to meet the positive net income target over the first two years of the rate period, thus smoothing the impact on rates of a significant increase in depreciation expense in 2013. Depreciation is a non-cash expense and therefore liquidity is projected to remain strong, as is debt service coverage, throughout the

¹ To provide an example order of magnitude of the potential impacts of the contract expense pass-through, an annual increase of 2.5 percent in contractual inflationary indices would increase proposed rates by an additional 1.4 to 2.1 percent per year during the proposed rate cycle. This estimated increase would rise with higher inflation and decline with lower inflation.

entire rate cycle. 2014 through 2016 rates result in positive net income. Table I-2 displays the current and projected financial performance for the SWF.

Table I-2
Solid Waste Fund Financial Performance (\$ millions)

		Actual 2011	Projected 2012	Forecast			
				2013	2014	2015	2016
Net Income	Positive	\$5.9	(\$2.3)	(\$2.0)	\$1.0	\$0.2	\$0.2
Debt Service Coverage	1.7x	5.6	3.1	3.2	2.9	2.6	2.2
Year-End Cash	20 days contract costs	\$ 18.5	\$ 18.9	\$ 20.9	\$ 21.7	\$ 17.7	\$ 15.8
CIP Financing	\$2.5M (in \$2003) or 10%	\$ 4.3	\$ 3.0	\$ 3.1	\$ 3.6	\$ 7.6	\$ 3.4

Contract Expense Pass-through

SPU's contracts with private haulers include provisions for annual inflationary adjustments tied to specific indicators such as CPU, and fuel and labor indices. Contract payments are the single largest expense component of the SWF revenue requirement, representing about 66 percent of the total 2013 operating and maintenance expense.

The rates legislation associated with this study establishes a pass-through mechanism allowing for annual adjustments to solid waste rates for inflationary increases in contract expense. The intent of the pass-through is to mitigate the risk of forecasting externally-imposed increases over a longer rate cycle. An alternative risk management mechanism would be to set rates using conservative inflation assumptions². While the pass-through will adjust changes to the unit rates charged by haulers, it will not address the impacts on expense of any variances between projected and actual demand assumed in this rate proposal. The SWF will need to absorb any revenue or expense impacts associated with these demand variances.

The rates legislation authorizes the use of the pass-through mechanism and establishes general parameters for cost increases. A separate Director's Rule will adopt the formula (s)³ and administrative procedures associated with the pass-through. Rates will be adjusted each April based on a formula which accounts for:

² For example, 2012 rates assumed a 2.96 percent inflationary adjustment to collection contracts. The actual 2012 increase to these contracts is 4.4 percent. A conservative assumption would be to assume a 4.4 inflationary increase for 2013 contract expense as well.

³ Not all contracts utilize the same inflationary indices nor impact all rates. Therefore, different formulas will apply to different groups of rates.

- Changes in applicable inflationary indices;
- Contract expense applicable each general class of rates;
- Adjustments to revenue-based taxes associated with rate increases; and
- Discounts/timing issues that reduce the amount of revenue recovered relative to the change in expense.

SPU will submit a pass-through ordinance to Council in the early part of each year with the proposed pass-through adjustments to rates for the pass-through, as well as supporting documentation on the calculation and the actual values used for to each formula variable. Base rate increases proposed under this rate study will be adopted via the proposed rates legislation and will be effective at the same time as pass-through increases.

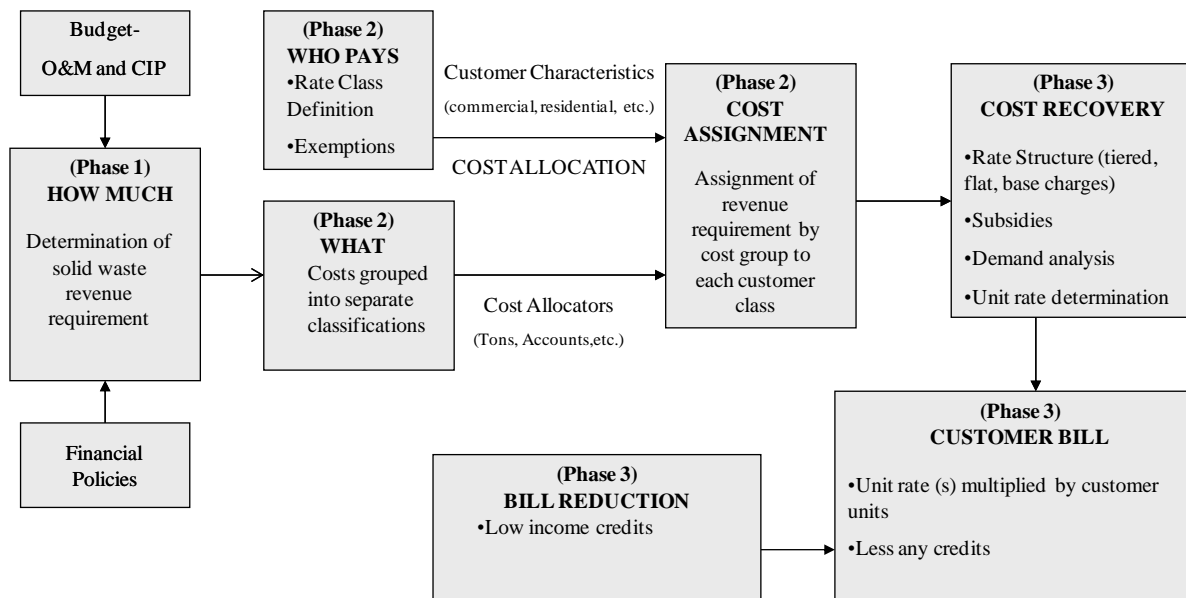
II. INTRODUCTION

SPU finances the acquisition, operation, and maintenance of Seattle’s solid waste system through the SWF. As an enterprise fund, the SWF functions like a self-supporting business that must generate operating revenues, predominantly through user charges (or “rates”), which are sufficient to cover all operating costs and meet financial policy targets. This document provides a summary of the 2013-2016 Solid Waste Rate Study. It examines the financial and policy issues of the SWF that affect rates. The Solid Waste Comprehensive Plan provides more information about the solid waste system in general.⁴

Ratemaking Process Overview

The following diagram displays the phases involved in the development of solid waste rates:

Figure II-1
Solid Waste Rate Setting Process



Chapter 3 of this document discusses Phase 1 (Revenue Requirement). Chapter 4 addresses Phase 2 (Cost Allocation), while chapters 5 and 6 discuss Demand and Rate Design, which are included in Phase 3.

⁴ The Solid Waste Comprehensive Plan can be found on SPU’s website at <http://seattle.gov/util/>.

Rate Setting Objectives

To set rates, SPU considers a number of factors to help evaluate policy and rate design decisions under consideration:

1. **Revenue Requirement:** Solid waste rates should be sufficient to meet the Solid Waste Fund's revenue requirement.
2. **Equity:** Rates should reflect a fair apportionment of the different costs of providing service among groups of customers.
3. **Customer Payment of Cost of Service:** Each customer class should generate sufficient revenue to cover both direct and indirect costs of service to the customer class over time.
4. **Conservation:** The rate structures should encourage waste reduction and recycling activities.
5. **Rate Stability:** Rate levels and structures should be changed in an orderly manner over time.
6. **Customer Understanding:** The rate structures should be clear and understandable to the customer.
7. **Financial Stability:** Revenue recovery from rates and other revenue sources should ensure financial stability, consistent with financial policies of the City.
8. **System and Administrative Costs:** The rate structures should minimize long and short-term administrative costs, including customer service, billing, and contract administration.
9. **Rate Impact Mitigation:** Mitigation of the impacts of solid waste rate increases to certain customers based on social or economic factors may be considered and implemented.

Financial Policies

Financial policies provide a guiding framework for Solid Waste finances. The policies help determine how much revenue SWF must collect from its customers each year to remain financially healthy. In any year (on a planning basis), the desired revenue requirement is the lowest amount of money necessary to simultaneously satisfy all financial policies in that year. At this desired revenue, some financial policies may be exceeded, but none will be missed – the financial target that is met last is known as the binding constraint.

In addition, financial policies:

- ◆ shape the financial profile that SWF presents to lenders and other members of the financial community;
- ◆ establish SWF's exposure to financial risk; and
- ◆ allocate SWF's costs between current and future ratepayers.

In 2004, City Council passed Resolution 30695, which adopted new SWF financial policies that reflect changes and additions that strengthened the financial policies adopted in 1992. The policies and associated targets, as well as their importance are described below.

Current and projected financial performance is presented in Table I-2 in the Executive Summary.

NET INCOME

Net income should be generally positive. Positive net income is a contingency against projection variances and uncertainties regarding revenues. It is also a signal to bond rating agencies that the City is committed to establishing fees that cover costs.

Net income is the binding constraint for this rate period. In other words, the rate increase necessary to result in positive net income is more than sufficient to meet cash and debt service coverage targets. Fund depreciation increases by \$2.2 million in 2013 (almost entirely due to the completion of the construction of the new South Transfer Station in 2012), putting pressure on net income. Depreciation is a non-cash expense which does not impact cash flow but does impact net income. SPU made a policy decision to meet the SWF's generally positive net income target over two years, thus smoothing the impact on rates. Consequently, net income is projected to be negative in 2013 and positive in all other years.

DEBT SERVICE COVERAGE RATIO

Debt service coverage should be at least 1.7 times debt service cost in each year on a planning basis.

The debt service coverage ratio is the ratio of revenues available for debt service to the annual debt service requirement. A higher debt service coverage ratio means that more revenue is available after debt payments are made. This reduces financial risk and provides more flexibility to respond to revenue shortfalls.

Historical and projected coverage (the latter includes new issues in 2011 and 2013) are well above both the policy target (1.70) and the legal bond covenant requirement (1.25).

OPERATING CASH BALANCE

The year-end operating cash balance should be at least equal to 20 days of contract expenses (approximately \$4.9 million in 2013). The purpose of the cash balance target is to have sufficient

cash on hand to pay operating expenses, taking into account the lag between cash disbursements and cash receipts, and to provide a reserve against projection variances.

The SWF begins the rate period with cash balances significantly above target due to better than projected operating performance during the past few years.

CASH CONTRIBUTION TO THE CIP

The cash contribution to the CIP in a given year should be at least \$2.5 million in 2003 dollars (\$3.1 million 2013). This policy 1) helps to prevent a rapid increase in debt levels and 2) limits the escalation in the debt-to-assets ratio.

While the solid waste CIP historically has been relatively small and the flat cash amount has been a substantial percentage, the CIP has grown significantly since 2007 in conjunction with the construction of facilities recommended under the Solid Waste Facilities Master Plan. In light of this higher spending, the last two rate studies (2009-10 and 2011-12) assumed a temporary internal policy of the greater of \$2.5 million (2003 dollars) or 10 percent of annual CIP spending.

Higher CIP spending is planned throughout the current rate period for the construction of the North Transfer Station and the South Recycling Processing Center. Therefore, a continuation of the internal policy noted above is recommended under this rate study as well.

Historical and projected cash contributions meet both the formal and internal policy target.

VARIABLE RATE DEBT

No more than 15 percent of total debt should be variable rate debt. A cap on variable rate debt balances the advantages of lower interest costs with the risk of unexpected increases in interest rates.

The Solid Waste Fund currently does not have any variable rate debt, and does not have any plans to issue any variable rate debt.

III. REVENUE REQUIREMENT

In the ratemaking process, the revenue requirement is the basis for determining how much revenue the rates must generate. There are two sets of drivers to the revenue requirement. The first set of drivers is operational costs of the solid waste system. The second set of drivers relates to the financial policies discussed in Chapter II. The revenue requirement is the minimum amount of operating revenue needed to cover the operational costs plus the financial requirements of the Fund, offset by any available revenue generated through non-rate means.

This section will provide an overview of major changes to the revenue requirement between 2012 and 2016 followed by a more detailed review of the impact of individual components. While not direct drivers of the revenue requirement, demand, rate discounts, and the timing of rate increases do impact the level of rates. Further discussion of these impacts follows the discussion of revenue requirement components.

Table III-1 summarizes the components of change in the SWF rate revenue requirement from 2012 to 2016. The change in the 2013 revenue requirement in Table III-1 and throughout this section is relative to the planned 2012 revenue requirement when rates were set, rather than the most recent year-end projection.

Table III-1
Components of the Change in the SWF Revenue Requirement
(\$ millions)⁵

	Rates								
	2012	2013	Change	2014	Change	2015	Change	2016	Change
Operations and Maintenance Expense (O&M)									
Base O&M	\$133.8	\$137.7	\$3.9	\$138.3	\$0.6	\$140.1	\$1.8	\$141.5	\$1.4
New Operating Expense	\$0.0	\$0.1	\$0.1	\$0.6	\$0.6	\$1.0	\$0.4	\$0.6	(\$0.3)
Total O&M	\$133.8	\$137.8	\$4.0	\$139.0	\$1.1	\$141.1	\$2.2	\$142.1	\$1.0
Taxes	\$23.3	\$24.2	\$0.9	\$25.0	\$0.8	\$25.1	\$0.2	\$25.3	\$0.2
Capital Financing									
Cash	\$3.6	\$3.1	(\$0.5)	\$3.6	\$0.5	\$7.6	\$4.0	\$3.4	(\$4.2)
Debt Service	\$10.4	\$10.3	(\$0.1)	\$12.5	\$2.2	\$13.9	\$1.4	\$16.5	\$2.6
Total Capital Financing	\$14.0	\$13.3	(\$0.7)	\$16.1	\$2.7	\$21.5	\$5.5	\$19.9	(\$1.6)
Total Revenue Requirement	\$171.1	\$175.3	\$4.2	\$180.0	\$4.6	\$187.8	\$7.8	\$187.3	(\$0.5)
Other Funding Sources									
Tonnage Taxes	(\$4.0)	(\$5.0)	(\$1.0)	(\$5.5)	(\$0.5)	(\$5.5)	(\$0.0)	(\$5.4)	\$0.1
Reimbursements and Misc Revenues	(\$5.5)	(\$7.7)	(\$2.2)	(\$7.7)	(\$0.0)	(\$7.6)	\$0.1	(\$7.6)	\$0.0
Residential and Self Haul Non-Rate Revenues	(\$4.4)	(\$4.8)	(\$0.5)	(\$4.9)	(\$0.1)	(\$5.0)	(\$0.1)	(\$5.1)	(\$0.1)
Change in Cash Balances	\$2.5	\$2.0	(\$0.5)	\$0.8	(\$1.3)	(\$4.0)	(\$4.8)	(\$1.9)	\$2.1
Total Other Funding Sources	(\$11.4)	(\$15.5)	(\$4.1)	(\$17.4)	(\$1.9)	(\$22.2)	(\$4.8)	(\$20.0)	\$2.2
Net Rates Revenue Requirement	\$159.7	\$159.9	\$0.1	\$162.6	\$2.7	\$165.6	\$3.0	\$167.3	\$1.7

Under the current proposal, the SWF rates revenue requirement rises from \$159.7 million in 2012 to \$167.3 million in 2016, with annual increases of \$0.1 million in 2013, \$2.7 million in 2014, \$3.0 million in 2015 and a decrease of \$1.7 million in 2016. These increases are largely driven by the operational and construction costs of new transfer stations. Construction of the NTS in 2014 and 2015 raises both capital financing expense and operations expense as the traffic normally served by this station must be diverted to the south station. The NTS is currently expected to open in the first quarter of 2016. Higher than projected contract inflation in 2012 (relative to that assumed in the 2012 rate study) is also a significant factor in the 2013 increase in the total funding requirement. Increases in other non-rates funding sources mitigate the increase in the rates revenue requirements in most years of the proposed rate period.

Rates revenues are sufficient to meet all financial targets in all years with the exception of net income in 2013. SPU made a policy decision to meet the net income target over a two year period to smooth the impact on rates of a significant increase in depreciation expense in 2013 due to the completion of construction on the new STS in 2012⁶.

⁵Columns in this table and others in this document may not add exactly to the total because of rounding in the individual numbers.

⁶ Depreciation of North Transfer Station Costs will not begin until 2017, assuming 2016 completion of construction.

SPU contracts with private haulers for the collection, processing, and disposal of garbage, recycling, and organics waste streams. Long-term contracts with these haulers include annual inflationary adjustments tied to specified indicators such as CPI, fuel, and labor indexes. Contract expense is projected to account for about 67 percent of total SWF O&M expense in 2013. To reduce the uncertainty associated with forecasting inflationary impacts on the fund's largest expense across a four year rate period, SPU proposes implementing a pass-through mechanism to cover annual inflationary contract adjustments in order to mitigate the risk of forecasting externally-imposed increases over a longer rate cycle. All expense and rate data presented in this study assume contract expense at current levels and do not include any inflationary increase to contract expense⁷.

Operations and Maintenance Expense (O&M)

Under this proposal, O&M increases by \$4.0 million in 2013 compared with 2012 rate assumptions, with additional annual increases of \$1.1 million, \$2.2 million, and \$1.0 million in 2014, 2015, and 2016. Table III-2 presents changes in proposed O&M spending by source.

O&M is presented in three categories, base O&M, spending reductions, and new O&M. **Base O&M** includes existing activities as well as changes to existing costs due to inflation or new policies. **Spending reductions** represent planned reductions, cost savings, and efficiencies relative to the base level of service assumed in the 2012 Adopted Budget. **New O&M** includes costs associated with new programs, policies or contracts.

The solid waste system O&M revenue requirement includes a portion of administrative expense (i.e. finance, customer service, etc.) that solid waste shares with the other SPU funds, as well as direct solid waste operating expense. For the purposes of this study, O&M does not include debt service or taxes, which are discussed in separate sections.

⁷ To provide an example order of magnitude of the potential impacts of the contract expense pass-through, an annual increase of 2.5 percent in contractual inflationary indices would increase proposed rates by an additional 1.4 to 2.1 percent per year during the proposed rate cycle. This estimated increase would rise with higher inflation and decline with lower inflation.

Table III-2
Change in Operating and Maintenance Expenditures
(\$ millions)

	Rates								
	2012	2013	Change	2014	Change	2015	Change	2016	Change
Base O&M									
SPU O&M inflation and base increases	\$44.1	\$47.9	\$3.8	\$49.1	\$1.2	\$51.1	\$2.0	\$53.1	\$2.0
Contract O&M	\$89.7	\$92.2	\$2.5	\$91.7	(\$0.6)	\$91.6	(\$0.1)	\$91.0	(\$0.5)
Total Base O&M (Pre-Reduction)	\$133.8	\$140.1	\$6.3	\$140.8	\$0.6	\$142.7	\$1.9	\$144.1	\$1.5
Reductions									
BIP-103: Waste Reduction and Recycling Outreach		(\$0.4)	(\$0.4)	(\$0.4)	\$0.0	(\$0.4)	\$0.0	(\$0.4)	\$0.0
BIP-105: SWF - Technical Cuts		(\$0.1)	(\$0.1)	(\$0.1)	\$0.0	(\$0.1)	\$0.0	(\$0.1)	\$0.0
BIP-107: Shared - Corporate Cuts		(\$0.6)	(\$0.6)	(\$0.6)	\$0.0	(\$0.6)	\$0.0	(\$0.6)	\$0.0
BIP-108: Shared - Position Changes		(\$0.4)	(\$0.4)	(\$0.4)	\$0.0	(\$0.4)	\$0.0	(\$0.4)	\$0.0
BIP-125: Shared - Technical		(\$0.5)	(\$0.5)	(\$0.5)	\$0.0	(\$0.5)	\$0.0	(\$0.5)	\$0.0
BIP-126: Private Garbage Transfer Reduction		(\$0.3)	(\$0.3)	(\$0.3)	\$0.0	(\$0.3)	\$0.0	(\$0.3)	\$0.0
BIP-301: SWF - Historic Landfill Temporary Savings		(\$0.1)	(\$0.1)	(\$0.1)	\$0.0	(\$0.1)	\$0.0	(\$0.1)	\$0.0
Total Reductions (\$2012)		(\$2.3)	(\$2.3)	(\$2.3)	\$0.0	(\$2.3)	\$0.0	(\$2.3)	\$0.0
Total Reductions (nominal \$)		(\$2.4)	(\$2.4)	(\$2.4)	(\$0.1)	(\$2.5)	(\$0.1)	(\$2.6)	(\$0.1)
O&M With Reductions	\$133.8	\$137.7	\$3.9	\$138.3	\$0.6	\$140.1	\$1.8	\$141.5	\$1.4
New O&M									
BIP-102: SWF - Above Ground Rates		\$0.1	\$0.1	\$0.1	\$0.0	\$0.1	\$0.0	\$0.1	\$0.0
BIP-104: SWF - South Transfer Station		(\$0.0)	(\$0.0)	\$0.1	\$0.1	\$0.4	\$0.3	\$0.4	\$0.0
BIP-300: SWF - NTS Diversion		\$0.0	\$0.0	\$0.4	\$0.4	\$0.5	\$0.0	\$0.1	(\$0.3)
Total New O&M (\$2012)		\$0.1	\$0.1	\$0.6	\$0.5	\$0.9	\$0.3	\$0.6	(\$0.3)
Total New O&M (nominal \$)		\$0.1	\$0.1	\$0.6	\$0.6	\$1.0	\$0.4	\$0.6	(\$0.3)
Net Total O&M	\$133.8	\$137.8	\$4.0	\$139.0	\$1.1	\$141.1	\$2.2	\$142.1	\$1.1

Note: South Transfer Station (BIP-104) presented under New O&M above is net of STS expense reductions presented under BIP-106 (excluded from the reductions above).

Base O&M

2013 base O&M is equal to 2012 non-contract Adopted O&M plus inflation plus projected contract expense. The sum of these components represents a \$3.8 million increase over base O&M assumed in 2012 rates. Inflation accounts for about \$1.3 million of this increase. The balance (\$2.5 million) is due to differences between non-contract expense in the 2012 Endorsed and the 2012 Adopted Budgets O&M. Non-inflationary increases to non-contract base O&M are substantially offset by \$2.4 million in spending reductions, as further delineated in the above table. Inflationary increases drive increases to non-contract Base O&M in 2014 through 2016.

Higher than projected actual contract inflation in 2012 (relative to that assumed in the 2012 rate study) is the primary driver of the \$2.5 million increase in 2013 contract expense. Contract O&M remains relatively constant from 2013 through 2016 in light of the proposed pass-through mechanism. 2015 contract expense includes an allowance for increased base costs associated with

a new organics processing contract currently under consideration. Other variances in contract expense in the out years are due to projected changes in tonnage and subscription levels.

Spending Reductions and New O&M

Table III-2 summarizes the individual components of planned reductions to base spending and new O&M adds. The proposed O&M budget preserves SPU's ability to perform our core and mandatory services of operating the transfer stations, household hazardous waste sites, and closed landfills.

The largest O&M add of \$830K provides for the effective transition to operating the new STS. The 2014 add of \$400K compensates our collection contractors for increased drive time to the STS while the NTS is under construction. To offset these adds SPU is reducing its budget as a result of efficiencies that have no impact to our service levels. The savings associated with efficiencies include temporarily decreasing the ground water monitoring frequency and reporting at Kent Highlands and Midway (\$76K), directing off-hours garbage disposal from Waste Management's transfer station to the new STS (\$250K), and reducing equipment maintenance, paving and other costs at the transfer stations (\$830K). In addition to the efficiency measures, SPU is also reducing service levels in some of our discretionary program areas, such as outreach and education for waste reduction and recycling (\$442K) and corporate support activities. The budget that remains provides funding for numerous programs, including: school grants, grasscycling, restaurant food bins, junk mail and yellow pages opt-out vendor payments, ethnic business greening, in-city government green purchasing, residential food waste compost collection promotion, and Resource Venture commercial customer outreach.

Other Expenses

Taxes

Table III-3 presents projected change in SWF tax expense between 2012 and 2016. SWF tax expenses include state and city taxes on revenues and City tonnage taxes (transfer tax).

City and State revenue taxes increase with increased revenue. In November of 2010 and 2011, City Council passed ordinances which increased the tonnage tax rate from \$8.50 in 2010 to \$13.27 in 2014. These rate increases raise SWF Transfer Tax expense in the early part of the rate period but are more than offset by declining garbage tonnage by 2013.

The **tonnage tax** is a City-levied per-ton tax on non-recycling solid waste transferred for disposal in Seattle. SPU pays the tax as both a collector of solid waste and an operator of a transfer station in the City. The tax is also paid by other entities for the non-contract tons they transfer within the City limits. The tax provides funding for Clean Cities programs. Solid waste rates are set to recover the cost of paying the tonnage taxes to the City. SPU recovers revenue in the rates, pays the City its tax obligation and then the City transfers the total tonnage tax receipts back to SPU to pay for Clean Cities related costs (see more details under Other Funding Sources below).

The City has adopted annual increases to the transfer tax through 2014. These increases drive the higher SWF expense through 2014. As SPU cannot anticipate future increases to the tax, lower expense in 2015 and 2016 is due to the effects of a decline in tonnage at a constant tax rate.

Since 2005, the SWF has classified **state refuse and sales tax expense** as a payable rather than an expense. As such, these taxes (both the expense and the revenue associated with them) are not included on the SWF income statement included in Appendix 1. This procedure has no effect on the net income of SWF, as both revenue and expense are reduced equally. However, these taxes are included in the revenue requirement and shown in Table III-3 to accurately reflect the full cost of service.

Table III-3
Tax Expenses (\$ millions)

	Rates 2012	2013	Change	2014	Change	2015	Change	2016	Change
City Taxes	\$13.1	\$13.1	\$0.0	\$13.4	\$0.3	\$13.6	\$0.2	\$13.8	\$0.2
State Taxes	\$7.4	\$7.5	\$0.1	\$7.6	\$0.1	\$7.7	\$0.1	\$7.8	\$0.1
Transfer Taxes	\$2.8	\$3.6	\$0.8	\$3.9	\$0.3	\$3.8	-\$0.2	\$3.6	-\$0.1
Total Taxes	\$23.3	\$24.2	\$0.9	\$25.0	\$0.8	\$25.1	\$0.2	\$25.3	\$0.2

Capital Financing

SPU funds solid waste system capital projects through a combination of current cash (revenues) and debt financing (revenue bonds). Capital spending is expected to remain at relatively high levels over the rate period, largely due to the re-building of the North transfer station, with projected spending at \$13.7 million in 2013, \$ 35.6 million in 2014, \$36.0 million in 2015 and \$24 million in 2016. These numbers represent a 90 percent completion rate of total proposed CIP spending levels.

Financing of the capital program increases by \$2.7 million in 2014, and again by another \$5.5 million in 2015, with lower financing expense in 2013 (-\$0.7 million) and 2016 (-\$1.6 million) relative to the prior years. Table III-4 presents capital spending (CIP) and financing assumptions during the proposed rate period, and how this financing impacts rates.

Table III-4
Capital Spending and Financing Assumptions
 (\$ millions)

		Rates				
		2012	2013	2014	2015	2016
CIP Assumptions						
Proposed CIP (90% Completion)		\$36.0	\$13.7	\$35.6	\$36.0	\$24.6
\$2.5 M (2003) cash target in nominal \$			\$3.1	\$3.1	\$3.3	\$3.4
10% of CIP cash target			\$1.4	\$3.6	\$3.6	\$2.5
CIP Financing Breakdown						
Revenue Financing		\$3.6	\$3.1	\$3.6	\$7.6	\$3.4
Revenue Financed Percentage		10%	22%	10%	21%	14%
Debt Financing		\$32.4	\$10.7	\$32.0	\$28.4	\$21.2
Bond Proceeds						
Debt Service						
Existing Debt Service	Interest	\$7.2	\$5.7	\$5.5	\$5.4	\$5.2
	Principal	\$3.3	\$3.3	\$3.5	\$3.7	\$3.9
2013 bond debt service	Interest		\$1.2	\$2.5	\$2.4	\$2.4
	Principal		\$0.0	\$1.0	\$1.0	\$1.1
2015 bond debt service	Interest				\$1.4	\$2.9
	Principal				\$0.0	\$1.1
Total Debt Service		\$10.4	\$10.3	\$12.5	\$13.9	\$16.5
Rate Drivers						
Change in Cash Financing			(\$0.5)	\$0.5	\$4.0	(\$4.2)
Change in Debt Service			(\$0.1)	\$2.2	\$1.4	\$2.6
Total Rate Impact			(\$0.7)	\$2.7	\$5.5	(\$1.6)

Cash Financing

As discussed in Chapter I, this rate study assumes that the minimum cash contribution to the CIP is the greater of 10 percent of the CIP in a given year or \$2.5 million (in 2003 dollars). Table III-4 presents the nominal dollar amounts for these two options. The balance of CIP spending will be funded with revenue bonds. The flat amount applies in 2013 and 2016, reducing the revenue requirement in these years as total cash-funded dollars declines with lower capital spending. The 10 percent applies to 2014 and 2015, increasing the revenue requirement as higher spending drives greater cash contributions. In 2015, an additional \$4.0 million (beyond the 10 percent target) in operating cash is contributed to capital financing to reduce the size of the 2015 bond issue.

Debt Service

The SWF last issued debt totaling \$45.8 million in 2011. The size of this issue was smaller than projected in the 2011-2012 rate study. Thus, actual 2012 debt service is about \$1.4 million lower than planned for 2012. The SWF expects to issue \$42.7 million in new bonds in 2013 and an additional \$49.6 million in 2015. The bond term is assumed at 25 years at an annual interest rate of 5.25 percent.

The 2013 bond issue will increase total debt service by \$2.1 million and the 2015 issue by \$4.0 million, with the full impact of these increases spread over two years in both cases. Actual 2012 debt service was much lower than that planned under the 2011-12 Rate Study as less debt was issued in 2011 than the study had anticipated. The one interest payment due in 2013 on debt to be issued in 2013 is roughly equal to the difference between planned and actual 2012 debt service. Consequently, debt service in 2013 does not increase relative to planned debt service under 2012 rates.

Other Funding Sources

A significant portion of the total solid waste system revenue requirement is funded through other operating and non-operating revenues. These non-rates revenues are expected to increase by \$1.8 million in 2013 compared with 2012 rate assumptions and further increase by \$1.9 million in 2014, \$4.8 million in 2015 and decrease by \$2.2 million in 2016, reducing the amount that must be recovered through rates in all years except 2016.

Tonnage Tax Revenues

As noted under Tax Expense earlier in this Chapter, the City levies a per-ton tax on all garbage tons transferred in the City. SPU, as a collector and transfer station operator, pays this tax to the City as do other entities. Per ordinance, all the receipts from the tonnage taxes are transferred from the General Fund to the Solid Waste Fund. Tonnage tax revenues are projected to increase by \$1.5 million between 2012 and 2014, remain constant in 2015 and decline by \$0.1 million in 2016. The increase in revenues is due to previously adopted increases in the 2013 and 2014 tonnage rate. As the tonnage tax is not a utility rate, SPU does not assume any increases beyond the currently adopted schedule for rate-making purposes. Therefore, with the rate held at 2014 levels in 2015 and 2016, we see the impact of declining tonnage on revenues.

Tonnage tax revenues, while a source of non-rates funding, do not fully recover the expense associated with the Clean Cities programs that they fund. As a result, in November 2011, the City Council passed legislation (Ordinance 123747) which adopted a new, three-year plan for balancing tonnage tax revenues and expenditures by reducing spending and increasing the tonnage tax rate for 2012 to 2014. The Transfer Tax is raised 14 percent each year, from \$9.91 per ton in 2012 to \$12.87 per ton by 2014. The increased tonnage tax revenue resulting from these increases in the tonnage tax rate will support existing Clean Cities program costs that were previously funded by general solid waste rates, but are more appropriately funded by a general purpose tax.

Reimbursement and Miscellaneous Revenue

Other non-rate revenues, such as interest income, grants, and recycling revenues at the transfer stations offset the rates revenue requirement. Expense reimbursements for the Local Hazardous Waste Management Program (LHWMP) and from Seattle City Light for the call center are also included in this category of revenues, as are recycling processing revenues.

The SWF began to report recycling processing revenues as an “Other Operating Revenue” beginning in 2010. These are revenues paid by Rabanco (a recycling processing contractor)⁸ to SPU when recycling market indices exceed the processing payment rate. Recycling processing expense paid by SPU is reported under contract expense.

In general, reimbursements and miscellaneous revenues are projected to remain constant across the rate period with the exception of a \$2.2 million increase in 2013 revenues. This variance represents the difference between recycling processing revenues assumed when 2012 rates were set (in 2010) and current projections for 2013.

Residential and Self-Haul Non-Rates Revenue

This grouping of non-rates revenues includes garbage extras and various residential ancillary services such as can-delivery charges and special pick up charges. Self-haul non-rates revenues include recycling revenues, wood waste revenues and appliance disposal charges. Revenues for these services are expected to increase by amount \$0.1 million per year between 2014 and 2016 with a slightly higher increase of \$0.5 million in 2013 relative to 2012 planned revenues as actual income for extras has been higher than expected under the last rate study.

Change in Cash Balances

Revenue generated by rates is used to fund current operating expenses, maintain a cash balance as a safeguard against unexpected expense, and to fund a portion of the current capital program. A rate may be set to increase, hold constant, or decrease the SWF’s operating fund cash balances. Decreasing, or drawing down a cash balance in a given year lowers the rates in that year as that cash does not need to be received through rate revenues. However, just like other funding sources, what affects rates is not the level in any one year, but the year to year change in funding from that source.

Table III-5 shows the beginning and ending cash balances for 2012 (expected) through 2016. The annual change in cash balances presents how much cash is drawn down (if negative) or built up (if positive) in any given year. The year-on-year change shows how much more, or less cash rates are set to generate from year to year

⁸ Seattle Iron and Metal Works also pays SPU a small amount of recycling processing revenues.

Table III-5
Change in Cash Balances (\$ millions)

	Rates				
	2012	2013	2014	2015	2016
Beginning Cash Balance	\$10.8	\$18.9	\$20.9	\$21.7	\$17.7
Ending Cash Balance	\$13.3	\$20.9	\$21.7	\$17.7	\$15.8
Annual Change	\$2.5	\$2.0	\$0.8	(\$4.0)	(\$1.9)
Year-on-year change (rate impact)		(\$0.5)	(\$1.3)	(\$4.8)	\$2.1

Rates are set to generate excess cash in 2013 and 2014 to meet net income requirements (further described below). In 2015 and 2016, cash balances are drawn down and used as an alternative funding source to current rate revenues for operating and capital programs, including a \$4.0 million higher than targeted cash contribution to CIP funding in 2015. In all years, except 2016, the change in cash balance is less than the prior year, thus reducing the rates revenue requirement in those years.

Net Income

Rates revenues are set to meet all financial targets in all years with the exception of net income in 2013. SPU made a policy decision to meet the net income target over a two year period (2013 to 2014) in an effort to smooth the impact on rates of a significant increase in depreciation expense in 2013 due to the completion of construction on the new South Transfer Station in 2012.

Depreciation and amortization are methods of allocating costs that benefit future ratepayers over a number of years. While depreciation and amortization are not a current year cash outlay and do not directly drive the revenue requirement, they impact net income. In order to meet the net income binding constraint target by 2014, revenues must be increased by more than the increase in cash operating expense in 2013 and 2014.

Other Rate Drivers

While not direct drivers of the revenue requirement, demand, rate discounts, and the timing of rate increases do impact the level of rates.

Change in Demand Forecast

Customer counts, tons and subscription levels affect revenues and the required change in rates from year to year. Reduced tonnages reduce costs in some cases, but also reduce the number of units to which the costs are allocated. The exact impact on rates depends on the relative changes in cost and revenue. In the first year of a rate study, deviations in past behavior from expectation are reflected as major rate drivers. Subsequent years see less drastic change as the new baseline is used. For 2013, the change in the demand forecast from 2012 rate assumptions is the largest deviation, and therefore the most significant rate driver. The 2013 demand components that have varied the most from earlier projections include:

- **Self-Haul Tons:** 2013 self haul tons are projected to be significantly lower than those projected for 2012 rates, and no recovery is projected for 2014 through 2016. Since customers pay by the ton for this service, the revenue impact is significant.
- **Commercial Drop Box Tons:** Drop boxes are hauled from the customer's site to the transfer station, where they are weighed and customers are charged by the ton. Drop box tons are substantially lower than 2012 rate assumptions.
- **Residential Subscriptions:** Residential customers continue to migrate to smaller can sizes in larger numbers than projected as they gain more comfort in recycling and particularly in composting. The result is less residential garbage can revenue.
- **Food and Yard Waste Subscriptions:** More customers than projected are switching to smaller container sizes, thus reducing revenues and increasing rates. This revenue loss is somewhat offset by an increase in total subscriptions

These factors are further explained in detail in Chapter V, Demand Analysis. The revenue impact⁹ of these changes by customer class is shown in Table III-6.

⁹ The revenue impact is measured by comparing revenues at the prior year's rates using the demand forecast for the current year. For example, for 2014, revenues are first calculated at 2014 proposed rate levels assuming 2014 forecasted demand. Revenues are then calculated at 2013 rate levels assuming 2014 demand. The difference between these two calculations is what appears in the table above, representing how much of a revenue change is driven by changes in demand.

Table III-6
Change in Demand Impact on Revenue
(\$ millions)

	2013	2014	2015	2016
Residential Can	(\$0.4)	\$0.5	\$0.2	\$0.3
Residential Food and YW	(\$0.3)	\$0.2	\$0.1	\$0.1
Residential Dumpster	(\$0.7)	\$0.3	\$0.1	\$0.2
Commercial	(\$2.4)	(\$0.1)	(\$0.4)	(\$0.3)
Self-Haul and Disposal	(\$2.0)	(\$0.5)	(\$0.6)	(\$0.5)
Total Revenue	(\$5.8)	\$0.4	(\$0.6)	(\$0.2)

Yellow Pages Legislation

In 2010, the City Council passed yellow pages legislation under Ordinance 123427 which imposed a solid waste recovery fee on the distribution of yellow pages books. The current recovery fee is under-recovering costs. Rates legislation will include a provision to increase the fee from \$0.14 per book to \$0.27 per book in 2013.

IV. COST ALLOCATION

After revenue requirements have been calculated, the cost allocation process assigns them to individual customer classes. This process estimates the true cost of serving different types of customers and provides the foundation for rate design, although actual rates may vary from the assigned cost allocations because of other (often times competing) ratemaking considerations. That is, for policy and other reasons, rates for some customer classes may not be set at their true cost.

The cost allocation process can be broken into four basic steps:

1. **Group Costs into Cost Centers**
2. **Assign Allocation Factors**
3. **Allocate Costs to Customer Classes and Rates**
4. **Analyze Impacts**

Group Costs into Cost Centers

SWF costs are divided into current (O&M) and non-current (depreciation and amortization of prior year capital expenditures) expenses and assigned to a cost center. A description of SWF cost centers can be found in Appendix 3. All budget activities, as well as current and future budget additions, are assigned to a cost center based on primary function. Costs for contracts, taxes, and bond interest are modeled based on the latest projections for tons, subscriptions, revenues and CIP spending, and are then assigned to cost centers.

Assign Allocation Factors

Once costs are grouped, each cost center is assigned an allocation factor. Allocation factors are multipliers that allocate cost centers into individual customer classes and eventually rates. The basis for allocation differs by cost center, but always seeks to logically assign each rate its fair share of the cost of providing a service based on known data. Allocation factors can be grouped into the following categories.

1. **Tonnage:** Many solid waste costs, such as contractor payments for recycling processing or garbage transfer and disposal, are directly related to tons collected or disposed. Costs are allocated based on the tonnage per customer class. Tons may also be used to allocate certain other costs even though there is not a direct relationship between the given cost and tons collected or disposed.
2. **Accounts/Premises:** This allocation method is used when the cost of service, such as billing expenses, is related to the number of households or accounts rather than tonnage or another measure of how much service a customer receives.

3. **Management Estimates:** Some allocations are based on management estimates of time spent serving different customer classes. Such estimates help determine the full cost of service for the class. For example, workload estimates are used to allocate inspection costs and in conjunction with tons, allocate transfer station costs.
4. **Direct Assignment:** Where solid waste costs benefit only one customer class, direct assignment to that class of such costs is appropriate.
5. **Proportional Assignment (Revenue Requirement Shares):** This method assigns costs in proportion to the sum of other allocated costs. The rate proposal uses this allocation method to assign costs such as taxes and general and administrative costs.
6. **Ad Hoc:** Often no one method is appropriate for allocating costs so a combination of other allocation factors is formulated to best fit the type of costs.

Allocate Costs to Customer Sectors and Rates

The principal customer classes in the SWF are:

Residential Sector

This customer sector consists of all single family and multifamily households in the City. This sector is further broken down into the following subgroups for rate-setting purposes:

- Single family garbage cans
- Residential food and yard waste
- Multifamily garbage dumpsters

SPU offers garbage, recycling, and food and yard waste services to residential customers. Single family residences receive weekly curbside garbage and food and yard waste can collection, and bi-weekly recycling collection. Multifamily buildings are generally serviced using dumpsters, and are required to have garbage service of sufficient size and collection frequency to meet the needs of the building.

Recycling and Disposal Station (Self-Haul) Sector

These customers include residents and businesses that bring garbage and recyclable materials (including yard waste and wood waste) to the City's Recycling and Disposal Stations.

Commercial Sector

This sector covers all non-residential subscribers to garbage collection services. Businesses may subscribe to can, dumpster, or drop box collection services at SPU's commercial rates. SPU also

offers commercial food and yard waste service, but the vast majority of this market is served privately. SPU offers limited recycling service to small businesses, but for the most part commercial recycling is not part of the City-provided services.

Analyze Impacts on Cost of Service

Table IV-1 shows the total costs allocated to each customer sector. Appendix 3 includes a table that shows the cost center breakdown by customer class, as well as the allocation factor used.

Table IV-1
Allocated Costs by Customer Sector

Customer Class	2013	2014	2015	2016
Residential Garbage Can	\$ 52.5	\$ 52.3	\$ 52.8	\$ 53.4
Residential Food & YW	\$ 28.0	\$ 28.7	\$ 30.1	\$ 30.9
Multifamily Garbage	\$ 32.4	\$ 32.4	\$ 33.0	\$ 33.5
Commercial Garb	\$ 44.3	\$ 44.0	\$ 44.3	\$ 44.1
Self-Haul	\$ 13.1	\$ 13.1	\$ 13.7	\$ 13.7
Total	\$ 170.3	\$ 170.5	\$ 173.9	\$ 175.6

% of total	2013	2014	2015	2016
Residential Garbage Can	31%	31%	30%	30%
Residential Food & YW	16%	17%	17%	18%
Multifamily Garbage	19%	19%	19%	19%
Commercial Garb	26%	26%	25%	25%
Self-Haul	8%	8%	8%	8%
Total	100%	100%	100%	100%

All customer classes have a stable allocation of costs throughout the entire rate period. There have been no major programmatic changes (new contracts, collection frequency changes, etc.) since the last rate study which could have altered the cost distribution. Thus, the customer class allocation above is very similar to that assumed for 2011-12 rates. Some potential unknowns going into the coming rate period that could change this are One Less Truck and a new organics processing contract.

V. DEMAND ANALYSIS

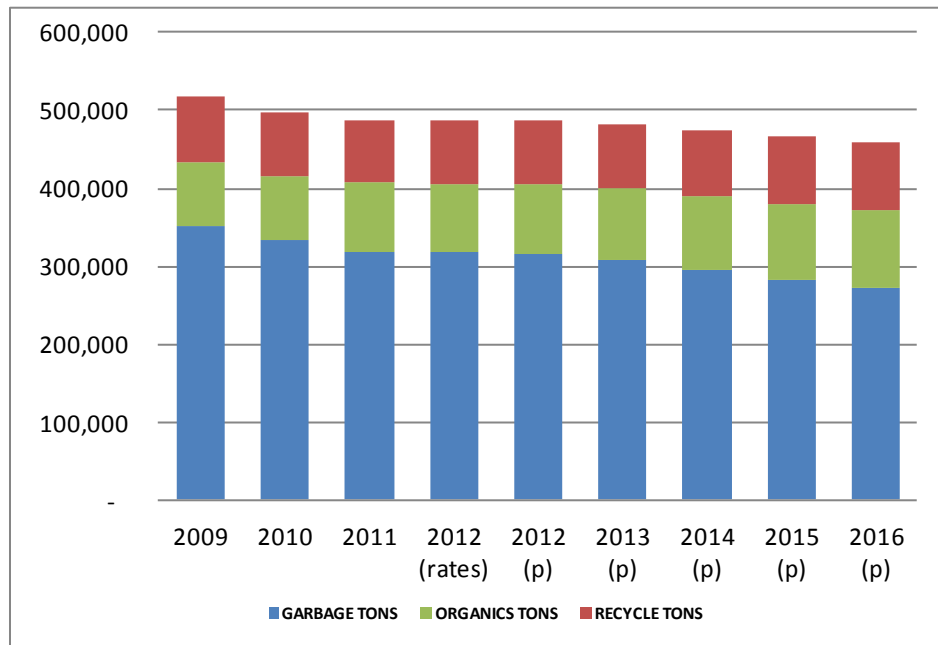
The demand analysis is a key step of the rate-setting process. Estimates of customer counts, tons and subscription levels from the demand analysis are used to determine the rates needed to meet the revenue requirement in future periods. Major changes in demand can also impact the revenue requirement itself.

This section will focus on factors that directly drive revenues and costs. Forecast tonnage is based on long-term modeling (2010 base year) conducted by SPU's Economic Services group for the Solid Waste Comprehensive Plan, which incorporates the impacts on demand of economic variables and waste reduction programs. The modeled tonnage for this rate study has been adjusted to a 2011 base year, with year-over-year changes in tons revised from the long-term forecast to better address current economic conditions and allow for some conservatism in setting a four year rate.

Overview of Actual and Projected Tonnage

Figure V-1 presents actual and projected generated tonnages by commodity stream. It includes garbage tons from self-haul, commercial, and residential customers. It includes only residential recycling tons since most commercial recycling is not provided by the City. Residential and self-haul food and yard waste tons are also included. A detailed table of tons by sector and waste stream can be found in Appendix 4.

Figure V-1
Actual and Projected Tonnages



A long term trend of decreasing total generation was accelerated in 2008 and 2009 by the declining economy. While garbage tons fell significantly during 2008 and 2009, recycling only fell slightly, and food and yard waste increased dramatically. Total tonnage is expected to continue declining, even while recycling and organics increase. The portion of total tons diverted to recycling and food and yard waste is expected to increase from 27.8 percent in 2008 to 40.3 percent in 2016.

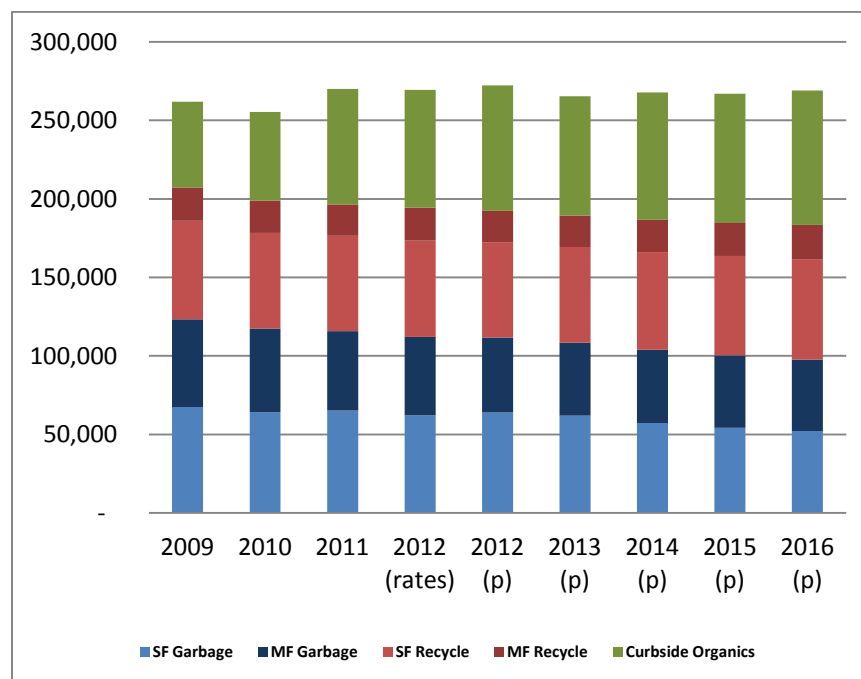
Residential Sector

Residential demand factors include the tonnage, subscriptions and level of service of this group of customers.

Tonnage

Figure V-2 shows the actual and projected residential tonnage.

Figure V-2
Residential Tonnage



Since the recession ended in 2009, total residential tonnage has remained relatively constant, a trend that is expected to continue. While total volume is unchanged, there has been a dramatic shift in the make-up of the waste. Expansion of the curbside food and yard waste program in 2009, which increased collection from bi-weekly to weekly, made service mandatory, added meat and dairy products as acceptable items, and offered additional cart sizes, has led to great growth in organic waste. Much of this growth has been a shift away from garbage, which has seen a comparable decline.

The growth in food and yard waste suggests that program changes are helping divert compostables from garbage, encouraging the use of curbside pickup rather than transfer stations for yard waste, and possibly capturing some material that was formerly backyard composted. This growth is expected to continue through the 2013-2016 rate period. Garbage tonnage has declined in a steady

manner, and is expected to continue the downward trend in the future. Total generated tons are projected to decline from 2011 levels in 2012 and 2013, stabilize in 2014 and then grow slowly in 2015 and 2016 as additional increases in recycling and organics tons from programs already in place outstrip declines in garbage.

Subscriptions

Residential Cans

Table V-1 shows total subscriptions, as well as the percentage breakdown between can sizes, for 2011, 2012 rates, and current 2013-16 projections.

Table V-1
Residential Garbage Can Subscriptions

	Actual	Rates				
	2011	2012	2013 (p)	2014 (p)	2015 (p)	2016 (p)
Micro	9.8%	8.1%	10.1%	10.5%	10.7%	10.9%
Mini	26.6%	25.6%	27.0%	27.4%	27.7%	27.9%
32 Gallons	58.5%	61.5%	57.9%	57.1%	56.5%	56.1%
64 Gallons	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
96 Gallons	1.1%	0.7%	1.1%	1.1%	1.1%	1.1%
Total Subscriptions:	163,880	164,583	163,880	163,880	163,880	163,880

Whereas the 2011-2012 rate study projected significantly lower total can subscriptions than in prior years, actual 2011 subscriptions were still below the rate study projection. In light of current economic uncertainties and the longer rate period, this rate study assumes that subscription levels will remain at 2011 levels throughout the rate period.

There has been a more pronounced shift to smaller can sizes during the current rate period than anticipated in the 2011-2012 Rate Study. As customers gain more comfort in recycling and composting, it is projected that there will be a continued shift to smaller can sizes.

Table V-2
Residential Food and Yard Waste Can Subscriptions

	Actual	Rates				
	2011	2012	2013 (p)	2014 (p)	2015 (p)	2016 (p)
13 Gallons	20%	19.2%	21%	21%	21%	21%
32 Gallons	6%	4.7%	6%	6%	6%	6%
96 Gallons	67%	68.4%	67%	67%	67%	67%
Total Subscriptions:	140,957	139,371	142,597	142,597	142,597	142,597
Home Composting Exemption	7%	7.6%	6%	6%	6%	6%

Actual growth in residential food and yard waste can subscriptions outstripped the 2011-2012 rate study, as did the projected increase in can downsizing. Participation rates are projected to increase modestly through 2013 from 2011 levels and then stabilize, with little change in can size.

Multi-family Dumpsters

Similar to the residential can customer class, demand in the multifamily customer class depends on the total number of accounts, as well as the levels of service the subscribers choose. The number of accounts depends on the number of multifamily buildings in the city, while service levels are driven by the size of the buildings, their occupancy rate, and the amount of garbage the tenants generate.

A multifamily subscriber's level of service is determined by four factors:

- 1) size of dumpsters,
- 2) number of dumpsters,
- 3) frequency of pickup, and
- 4) whether the garbage is compacted or not.

To provide appropriate service for buildings that vary in size from only a few to several hundred units, there are hundreds of different service levels offered to customers. Table V-3 presents an annual summary of services broken down into their basic components: the number of accounts, the annual count of pickups, volume, and CAP bags sold are also shown.

Table V-3
Multifamily Garbage Dumpster Services

	Actual	Rates				
	2011	2012	2013 (p)	2014 (p)	2015 (p)	2016 (p)
Accounts	5,313	5,688	5,313	5,313	5,313	5,313
Pickups / yr	456,173	467,984	454,803	454,161	453,494	453,093
Volume / yr	966,512	973,248	963,610	962,249	960,836	959,985
CAP Bags	26,736	15,333	26,656	26,618	26,579	26,555

In 2011 demand for the Clear Alleys Program jumped beyond what was assumed in the 2011-12 rate study. This led to the underestimation of CAP bag pickups over the two year period. Simultaneously, the number of dumpster accounts, pickups and volume, fell. Current projections for 2013 through 2016 are based on 2011 actual data. It is expected that pickups, volumes and CAP bags will decrease during the rate period.

Multifamily Recycling

Multifamily customers are encouraged to subscribe to recycling services that meet the needs of their buildings. Recycling service is provided free of charge. An additional customer benefit of recycling is that it diverts material from their garbage, allowing for a lower garbage service level, and thus a lower cost. The number of accounts, number and size of containers, and frequency of recycling collection all impact SPU's costs. However, because historical data on multifamily recycling service trends is limited, cost projections are tied directly to tonnage changes. Appendix 4 shows multifamily recycling tons are projected to increase moderately each year from 2010 through 2012.

Extras

Single and multifamily customers are charged for each extra unit of garbage or yard waste set out next to their containers for collection. Demand for garbage and yard waste extras in 2013 through 2016 is forecast to remain at the levels observed in 2011.

Low Income Rate Assistance

Like other demand components, changes in customer participation in the low income rate assistance program do not affect the Solid Waste Fund revenue requirement, but do affect the rate increase. Increased participation in the program reduces revenues as more households pay at a discounted rate. The reduction in revenue must be made up through an increase in standard rates.

Changes to the Low Income Rate Assistance program went into effect in 2009, including automatic enrollment with income self-certification, relaxing the income threshold, and increased outreach.

These changes were expected to increase the participation rate and therefore the total amount of discounts.

Surprisingly, the numbers of participating customers, and total discounts issued as a percentage of residential revenue, have remained near their long term averages through 2009. Additional efforts to increase participation occurred in 2011, and have increased enrollment slightly. Participation is projected to remain level for 2013-16 with 6,650 single family can and 3,050 multifamily customers receiving discounts. The total discount issued as a percentage of annual residential sector revenue is projected to remain at the 2011 level of 1.9 percent.

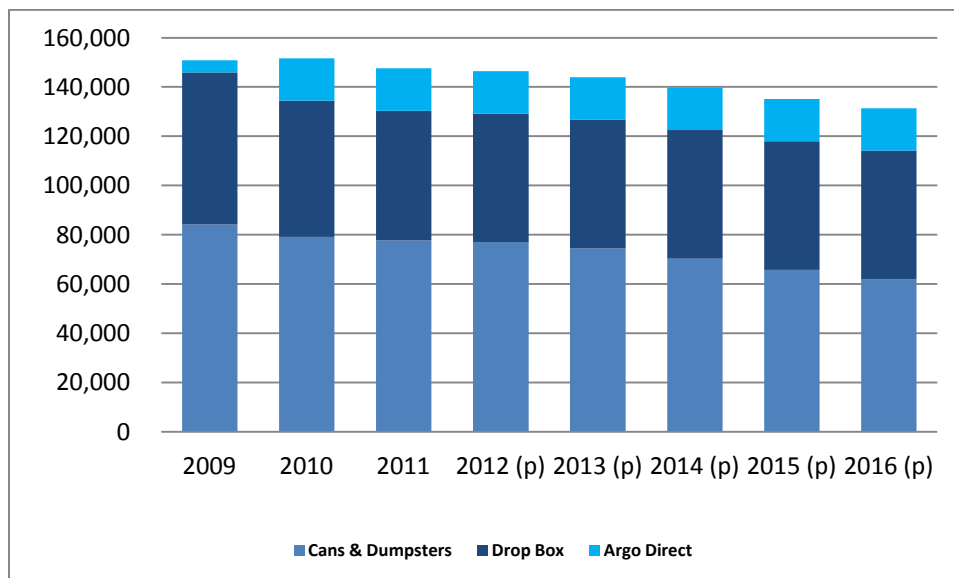
Commercial Sector

Commercial sector demand depends on the type of service, size and number of containers, and the frequency of collection. Customers can choose regularly scheduled container service, or on-call drop box (or roll off) service.

Garbage Tonnage

Figure V-3 shows actual commercial garbage tons from 2009-2011 and projected tons from 2012-2016.

Figure V-3
Commercial Garbage Tons



Commercial tonnage historically has shown a sensitivity to fluctuations in the economy that is not present in other markets. Commercial tonnage has gone through at least three cyclical increases

and decreases over the last 25 years, while residential tonnage has shown a nearly constant downward trend over the same period.

As a result of the recession, actual commercial garbage tons disposed in 2009 were by far the lowest recorded in the previous 25 years. While economic factors explain the sudden and extreme nature of the tonnage decline, the impact of SPU's ongoing waste reduction and recycling programs is also evident. While there was a slight bump in 2010, the downward trend has continued in 2011 and 2012. The downward trend is expected to continue through 2016. Argo direct tons, which are non-contract tons taken directly to the railhead for disposal, declined to less than 50 percent of their 2007 level by 2009. However, as commercial customers adapted to economic conditions, Argo tonnage tripled in 2011, with those levels expected to continue.

Food Waste and Yard Waste Tonnage

Table V-4 shows actual and projected commercial food and yard waste tons. Total tons are expected to increase as the requirement that disposable food-ware be compostable is implemented and grows. The bulk of commercial food and yard waste tons are collected by non-contract providers.

Table V-4
Contract Commercial Food and Yard Waste Tons

	Actual	Rates				
	2011	2012	2013 (p)	2014 (p)	2015 (p)	2016 (p)
Current SPU Program	2,680	2,680	2,680	2,680	2,680	2,680
Food-Ware Requirement	-	-	320	595	844	636
Total Tons:	2,680	2,680	3,000	3,275	3,524	3,316

Subscriptions

Table V-5 presents commercial detachable container, CAP Bag, and drop box services provided in 2011, estimated in the last rate study for 2012, and current 2013-16 projections. A commercial dumpster customer's level of service is determined by the size of containers, the number of containers, the frequency of collection, and whether the containers are compacted. A commercial drop box customer's level of service is determined by the number of pickups requested, and the actual tons of garbage disposed.

**Table V-5
 Commercial Garbage Services**

	Actual 2011	Rates 2012	2013 (p)	2014 (p)	2015 (p)	2016 (p)
Detachable Containers						
Accounts	7,748	7,671	7,748	7,748	7,748	7,748
Pickups / yr	500,324	490,579	500,324	500,324	500,324	500,324
Volume / yr	1,177,157	1,200,278	1,160,373	1,138,301	1,113,894	1,093,811
CAP Bags	302,830	315,321	290,494	274,270	256,330	241,569
Drop Boxes						
Accounts	430	472	430	430	430	430
Pickups / yr	14,322	14,534	14,235	14,235	14,235	14,235
Tons	52,677	56,373	52,214	52,214	52,214	52,214

As noted earlier, there were unprecedented decreases in commercial tonnage in 2008-09. While account levels and associated pickups are higher than the 2011-12 rate study projections, the total number of accounts has continued to decline year-on-year. Account levels are expected to stabilize, remaining at 2011 levels, while volume levels are expected to decrease slightly as businesses adjust their waste levels to help control costs. The current projection for detachable container accounts and volumes in 2012 is higher compared to that planned for in 2012 rates, as fewer customers switched to CAP bags than planned.

Drop box customers are requesting fewer collections than planned for in 2012 rates, and drop box tons also have fallen more than anticipated, having a direct impact on revenue. The rate of pickups and tonnage is expected to remain at 2011 levels.

Small Business Recycling

To encourage small businesses to recycle, commercial customers can subscribe to bi-weekly curbside pickup of up to 2-96 gallon carts of recycling at no charge. This service was first offered in 2005. In 2011 there were just under 4,000 small businesses using the service.

Commercial Curbside Food and Yard Waste

Starting in 2009, commercial customers have been allowed to subscribe to weekly curbside food and yard waste at the residential rates. The number of customers utilizing this service has been growing, with 320 accounts using this service as of December 2011.

Self-Haul Sector

Self-haul sector revenues depend directly on the amount of garbage and yard waste brought to the Recycling and Disposal Stations by per ton customers, and the number of trips to the stations by flat rate customers. Table V-6 presents actual transfer station tons and trips for 2011, 2012 rates, and 2013-16 projected.

Table V-6
Self-Haul Tons and Trips

	Actual	Rates				
	2011	2012	2013 (p)	2014 (p)	2015 (p)	2016 (p)
Garbage:						
Tons	64,827	72,954	62,491	59,021	55,036	51,782
Flat Rate Trips	25,815	32,543	25,815	25,815	25,815	23,131
Yardwaste:						
Tons	7,804	10,668	8,173	8,543	8,543	8,632
Flat Rate Trips	2,575	2,575	2,575	2,575	2,575	2,575

*tons from flat rate trips not included in "tons"

Self-haul garbage tons experienced an unprecedented decline from 2007 to 2011. There were approximately 100,343 self-haul tons in 2007, dropping to 64,827 tons in 2011. Self haul tons are projected to remain on a downward trajectory through 2016. Flat rate trip levels also are well below previous levels, and 6,700 below planned in 2010 rates for 2011-12.

Self-haul yard waste tons declined from 13,738 in 2007 to 7,804 in 2011. A portion of this decline can be attributed to increased usage of the curbside organics program. Self-haul yard waste tons are projected to increase moderately between 2013 and 2016. Flat rate trips are projected to remain constant during the same period.

VI. RATE DESIGN

Rate design is the last step in the rate-setting process in which the structure and level of the rates for each of the different services and service levels is determined.

Rate design is the point at which non-cost considerations such as rate gradualism, encouraging waste reduction, low-income rate assistance, and other policy issues are factored into the rates. In some cases these considerations result in deviations from setting rates at their cost of service.

2011-2012 Rate Design Strategy

Excluding limited exceptions specifically noted within this section, **this rate study proposes equal increases across all rates of 4.6 percent in 2013, 2.2 percent in 2014, 2.6 percent in 2015 and 1.6 percent in 2016.**¹⁰ As discussed in Chapter IV, there have been no significant changes to the cost of providing service to each customer class relative to the 2011-12 Rate Study, and no changes are expected over the course of the rate period. As a result, there is no significant change in the relative rate structure, however the introduction of a contract inflation pass-through and the shift to April effective rates are two upcoming changes.

Contract Expense Pass-Through

As discussed in Chapter III, SPU's contracts with its collections, processing, and disposal contractors include provisions for annual inflationary adjustments tied to specific indicators such as CPU, and fuel and labor indices. Under this rate study, SPU proposes implementing an annual pass-through mechanism for inflationary contract increases to mitigate the risk associated with forecasting inflation (and particularly the more volatile components such as fuel) over a four-year rate period. Rates will be adjusted annually based on a formula which accounts for:

- Changes in applicable contractual inflationary indices;
- Weights for the percentage of the revenue requirement represented by contract expense, by contract type (collections, organics, disposal);
- Weights for the percentage of total SWF revenue generated by rates adjusted through the pass-through process (by contract type);
- Adjustments to revenue-based taxes associated with rate increases); and
- Discounts/timing issues that reduce the amount of revenue recovered relative to the change in expense.

¹⁰ Self haul rates and certain ancillary charges.

SPU will submit a pass-through ordinance to Council in the early part of each year with the proposed adjustments to rates for the pass-through, as well as supporting documentation on the calculation and the actual values applied to each variable. Base rate increases proposed under this rate study will be effective at the same time as pass-through increases. Consequently, solid waste rates will increase once annually, on April 1 instead of on January 1 which was the past practice.

April 1 Effective Date of Rates

Increases related to the pass-through would become effective on April 1 of each calendar year in tandem with established contract cycles which adjust rates annually on this same date. To maintain simplicity, SPU proposes that the base rate increases proposed herein be also effective on April 1 of each year. 2012 rates will apply through March 31, 2013, 2013 rates from April 1, 2013 through March 31, 2014, and so on.

The following sections discuss the proposed individual rates within each customer sector. A detailed set of rate tables can be found Appendix 5. All rates proposed in this study are base increases. Any applicable pass-through will be added to these rates each year through a separate ordinance. Typical bills for selected customers are shown in Table VI-10 at the end of this chapter.

Residential Variable Can Rate Design

The rates charged by SPU for residential garbage can service are known as “variable can rates” because they vary with the garbage service levels to which the customer subscribes. Currently, SPU’s variable can rates are structured so that the customer’s bill/rate increases with the amount of garbage service to which he/she subscribes. Both single family and multifamily dwellings can subscribe to variable can service. In general, garbage is collected from the curb or alley; however, customers can elect to have their garbage collected from their backyards.

In addition to covering the cost of garbage collection, transfer, and disposal, can rates cover recycling collection and processing costs, part of compost collection and processing costs, and low income rate assistance.

Proposed Variable Can Rates

The proposed variable can rates are shown in Table VI-2. Increasing rates for larger cans provide important price signals to encourage customers to recycle, reduce waste and minimize their can size. Backyard service continues to be provided at a 40 percent premium to discourage overuse of the service. Customers may continue to qualify for backyard rate exemptions if they have physical limitations.

Table VI-2
Current and Proposed Curb/Alley Can Service Monthly Rates

	2012	2013	2014	2015	2016
Micro Can	\$ 17.55	\$ 18.35	\$ 18.75	\$ 19.25	\$ 19.55
Mini Can	\$ 21.55	\$ 22.50	\$ 23.00	\$ 23.60	\$ 24.00
32 Gallon Can	\$ 28.05	\$ 29.35	\$ 30.00	\$ 30.75	\$ 31.25
64 Gallon Can	\$ 56.10	\$ 58.70	\$ 60.00	\$ 61.50	\$ 62.50
96 Gallon Can	\$ 84.15	\$ 88.05	\$ 90.00	\$ 92.25	\$ 93.75
Extras	\$ 8.60	\$ 9.00	\$ 9.20	\$ 9.45	\$ 9.60

Bulky item pickups will remain at \$30 per item so that the rate remains consistent with self-haul rates for bulky items. Curbside electronics recycling will remain at \$20.

Residential Food and Yard Waste (Compost) Rate

All can customers are required to subscribe to food and yard waste service. Containers are collected weekly, and all food waste (including meat and dairy) is accepted in the containers. The proposed monthly rates are shown in Table VI-3.

Table VI-3
Current and Proposed Monthly Food and Yard Waste Rates

	2012	2013	2014	2015	2016
Mini Can	\$ 4.65	\$ 4.90	\$ 5.00	\$ 5.10	\$ 5.20
32 Gallon Can	\$ 6.95	\$ 7.30	\$ 7.45	\$ 7.65	\$ 7.80
96 Gallon Can	\$ 8.95	\$ 9.35	\$ 9.55	\$ 9.80	\$ 9.95
Extras	\$ 4.45	\$ 4.65	\$ 4.75	\$ 4.90	\$ 4.95

Food and Yard Waste Exemptions

Residential can customers who can demonstrate that they actively compost yard waste and vegetative food waste on-site are eligible for a food and yard waste rate exemption. To qualify for this exemption, customers must agree to public and environmental health guidelines and submit to inspection of their composting methods, as required, by SPU inspection staff.

Residential Detachable Container (Dumpster) Rate Design

Residential detachable container service is available to apartment buildings with five or more residential units. Detachable rates reflect SPU's contract payments structure and include a flat monthly account fee, a trip rate charged for each container pick-up, and a volume rate (a trip rate that varies with container size):

$$((A+(B*cy))*m)+C$$

Where:

A = Pick-up rate

B = Volume rate

C = Account Fee

m = Number of pick-ups per month.

cy = Container size in cubic yards.

Dumpster rate components are designed to further encourage dumpster customers to recycle, reduce waste and minimize the number of collections per week and the number of containers. Proposed rates are below:

Table VI-4
Current and Proposed Residential Uncompacted Dumpster Rates

	2012	2013	2014	2015	2016
Account Fee	\$ 29.95	\$ 31.35	\$ 32.00	\$ 32.85	\$ 33.35
Pick-Up	\$ 23.20	\$ 24.25	\$ 24.80	\$ 25.45	\$ 25.85
Volume (Uncompacted)	\$ 17.80	\$ 18.60	\$ 19.05	\$ 19.50	\$ 19.85
Volume (Compacted)	\$ 36.13	\$ 37.76	\$ 38.67	\$ 39.59	\$ 40.30

Compacted rates are higher than un-compacted rates because a compacted container can hold up to five times the garbage of an un-compacted container. Based on internal data, compacted containers weigh 2.03 times regular containers, on average. Therefore, the volume rate for compacted dumpsters is charged at 2.03 times that of uncompacted container rates.

Food and Yard Waste Compost Service

Residential customers with detachable container service who want food and yard waste service can subscribe to the residential service at the rates shown in Table VI-3, or to the commercial service, which is described later in this chapter.

Residential Ancillary Services

Proposed rates for residential ancillary services will increase at the same level as all other rates. A list of ancillary services is located in Appendix 5.

Special Pick-up Service

SPU provides special, non-routine container pick-up service (also known as “paid specials”) at a premium rate. The premium is designed to cover additional customer service and billing costs, inspector time, contractor payments and transferring, hauling, and disposal costs associated with the special pick-up. Starting in 2011 residential special pick-ups were charged at 130 percent of

the regular pick-up and volume fee. This premium remains unchanged during the proposed rate period.

Low Income Rate Assistance Program

Qualified low-income customers receive a 50 percent discount on their solid waste bill or a fixed credit on their City Light bill (if they do not receive an SPU bill directly). For can customers the fixed credit is equal to 50 percent of the typical solid waste customer's bill (i.e., 50 percent of the single can rate plus food and yard waste. For apartment dwellers the fixed credit is equal to 50 percent of the average dumpster bill per household). This approach is consistent with the other City utilities.

There is no discount on extra garbage or food and yard waste charges for qualified low-income customers. Extra garbage or food and yard waste is billed at full rates. Low income rate credits can be found in Appendix 5.

Utility Low Income Emergency Assistance Program

An Emergency Assistance Program offers eligible low-income customers facing shut off due to delinquent bills an emergency credit of 50 percent off their past-due combined bill, up to a maximum credit of \$312 (in 2012) for wastewater, water, and solid waste combined. They are eligible to receive this credit once per 12-month period. Charges to SWF for 838 participants in 2011 were \$64,016. In 2012 the eligibility requirements were changed from 120 percent of the federal poverty level to 70 percent of state median income leading to increased usage of this service.

Recycling and Disposal Station Rates (RDS or Self-Haul)

Self-haul customers in cars or trucks can deliver garbage, yard waste, wood waste, appliances, and recyclable materials to either of two stations within the city. The current rate is \$145/ton. This rate study proposes no changes to this rate during the 2013 through 2016 rate period.

Commercial Rates

Commercial rates include container and drop box service for both garbage and food and yard waste (compost). Individual rate components may vary from what allocated costs dictate in an effort to further encourage dumpster customers to recycle, reduce waste and minimize the number of collections and containers. Commercial customer rate changes are identical to those for residential customers.

Container Service

Container service includes uncompacted or compacted dumpster service, as well as can service. The contents of the container are tipped into the collection vehicle and customers are charged for each tip (pick up), regardless of the amount of waste within the container. The formula for commercial detachable rates is the same as for residential customers:

$$((A+(B*cy))*m)+C$$

Where:

A = Pick-up rate

B = Volume rate

C = Account Fee

m = Number of pick-ups per month.

cy = Container size in cubic yards.

Table VI-5
Current and Proposed Commercial Dumpster Rates

	2012	2013	2014	2015	2016
Account Fee	\$ 20.80	\$ 21.75	\$ 22.25	\$ 22.80	\$ 23.20
Pick-Up	\$ 13.50	\$ 14.10	\$ 14.45	\$ 14.80	\$ 15.05
Volume (Uncompacted)	\$ 22.90	\$ 23.95	\$ 24.50	\$ 25.10	\$ 25.50
Volume (Compacted)	\$ 46.49	\$ 48.62	\$ 49.74	\$ 50.95	\$ 51.77

Drop Box Service

Drop box service customers are delivered a roll-off container that is then picked up and transferred for disposal through one of the transfer stations. Customers are charged for the delivery of the container, the pick-up of the container, a rental/account fee, and a per ton (disposal) fee for its content. The disposal fee is intended to cover SPU's cost of transfer and disposal, the transfer tax on the tons disposed, and a portion of SPU's administrative costs. Proposed drop box fees can be found in Appendix 5.

Food and Yard Waste (Compost) Service

Commercial food and yard waste service is provided at a 32 percent discount over garbage rates. Some commercial customers who generate small amounts of compost may utilize the residential organics service. Large volume organics is also at the tonnage rates presented in Table VI-6.

Table VI-6
Current and Proposed Commercial Organics Rates

	2012	2013	2014	2015	2016
Organics Per Ton	\$ 73.25	\$ 76.60	\$ 78.30	\$ 80.35	\$ 81.65

Commercial Ancillary Services

Commercial ancillary services will change at the same rate as all other commercial rates. A list of ancillary services is located in Appendix 5.

Special Pick-up Service

Like residential special pickups, commercial pickups will be charged at 130 percent of the regular pickup rate.

Commercial Extras

Proposed commercial extras rates (per bag) increase at the same rate as regular service. No change is proposed to bulky service rates.

Table VI-7
Current and Proposed Commercial Extras Rates

	2012	2013	2014	2015	2016
Extra Garbage	\$ 8.60	\$ 9.00	\$ 9.20	\$ 9.45	\$ 9.60
Bulky	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00

Disposal (Tipping) Fee at the Railhead

Non-contract commercial waste is brought by the private transfer stations to the railhead in south Seattle, where it is placed on a train and taken to the landfill in Arlington, Oregon. Railhead tonnage is not a significant revenue source and makes up roughly one percent of SPU's total tonnage. The proposed rate increases at the same rate as all other rates and recovers the cost of disposal, billing and a share of the general and administrative costs of SWF.

Table VI-8
Current and Proposed Argo Direct Rates

	2012	2013	2014	2015	2016
Argo Direct Rate/Ton	\$ 93.60	\$ 97.90	\$ 100.05	\$ 102.65	\$ 104.30

Clear Alley Program Pre-Paid Bag Service

Starting in 2009, residential and commercial dumpster customers located within areas designated by SPU, and whose dumpsters were located in the right-of-way, were required to subscribe to a pre-paid bag service in lieu of dumpster service. Rates for the service cover approximately 60 percent of cost. The remaining cost is spread across the whole customer base.

Table VI-9
Clear Alley Program Bag Rates

	2012	2013	2014	2015	2016
15 Gallon	\$ 3.70	\$ 3.85	\$ 3.90	\$ 4.00	\$ 4.05
30 Gallon	\$ 5.30	\$ 5.55	\$ 5.65	\$ 5.80	\$ 5.90
45 Gallon	\$ 8.00	\$ 8.35	\$ 8.55	\$ 8.75	\$ 8.90
Extras	\$ 8.60	\$ 9.00	\$ 9.20	\$ 9.45	\$ 9.60

Typical Customer Bills

Table VI-10 shows actual and projected monthly bills for typical customers from 2011 through 2016. The bills presented below are at the rates effective on April 1 of each year and are indicative of typical monthly bills between April and December of each calendar year. Typical bills for January through March will be at the prior year's rates. Thus the average monthly bill for any calendar year will be less than the bills presented below.

Table VI-10
Typical Monthly Customer Bills

	2011	2012	2013	2014	2015	2016
Single Family	\$34.75	\$37.00	\$38.70	\$39.55	\$40.55	\$41.20
Convenience Store	\$376.73	\$376.73	\$393.91	\$403.07	\$412.93	\$419.61
Small Apartment Complex	\$267.87	\$284.55	\$297.43	\$304.36	\$311.92	\$317.18
Office Building	\$1,085.98	\$1,085.98	\$1,136.08	\$1,160.82	\$1,191.03	\$1,209.84

APPENDIX I – INCOME STATEMENT

		Income Statement					
Operating Revenues (\$1,000s)		2011	2012	2013	2014	2015	2016
Direct Service (Residential)		\$ 91,473	\$ 97,657	\$ 101,267	\$ 103,896	\$ 106,361	\$ 108,214
Residential Cans			\$ 54,455	\$ 56,606	\$ 58,035	\$ 59,393	\$ 60,407
Residential Dumpsters			\$ 28,736	\$ 29,697	\$ 30,481	\$ 31,203	\$ 31,751
Residential Yard Waste			\$ 14,465	\$ 14,964	\$ 15,380	\$ 15,765	\$ 16,056
Commercial		\$ 46,692	\$ 46,626	\$ 47,866	\$ 48,555	\$ 49,066	\$ 49,374
Other		\$ 16,034	\$ 14,405	\$ 13,624	\$ 13,218	\$ 12,671	\$ 12,155
Total Operating Revenues		\$ 154,200	\$ 158,688	\$ 162,758	\$ 165,670	\$ 168,099	\$ 169,743
Operating Expenses							
Solid Waste Collection		\$ 90,248	\$ 92,562	\$ 92,241	\$ 92,099	\$ 92,012	\$ 91,126
SPU Branch Operating O&M		\$ 30,206	\$ 40,705	\$ 39,832	\$ 40,968	\$ 42,978	\$ 44,637
Taxes - City		\$ 15,052	\$ 15,849	\$ 16,701	\$ 17,334	\$ 17,398	\$ 17,470
Taxes - State		\$ 2,789	\$ 2,878	\$ 2,971	\$ 3,025	\$ 3,071	\$ 3,102
Depreciation and Amortization		\$ 7,423	\$ 8,381	\$ 10,623	\$ 9,249	\$ 9,511	\$ 7,894
Amortization of Landfill/Postclosure		\$ 1,341	\$ 1,341	\$ 1,341	\$ 1,341	\$ 1,341	\$ 1,341
Total Operating Expenses		\$ 147,059	\$ 161,716	\$ 163,708	\$ 164,016	\$ 166,311	\$ 165,570
Non-Operating Revenues (Expenses)							
Investment Income		\$ 321	\$ 270	\$ 365	\$ 381	\$ 312	\$ 284
Interest Expense		\$ (2,840)	\$ (4,526)	\$ (6,611)	\$ (6,714)	\$ (7,574)	\$ (9,853)
Interest			\$ (6,079)	\$ (6,954)	\$ (8,041)	\$ (9,261)	\$ (10,469)
AFUDC			\$ 1,554	\$ 344	\$ 1,327	\$ 1,687	\$ 616
Amortization of Debt Expenses		\$ (52)	\$ -	\$ -	\$ -	\$ -	\$ -
Gain on Sale of Capital Assets		\$ 64	\$ -	\$ -	\$ -	\$ -	\$ -
Others, net		\$ 559	\$ 4,446	\$ 4,828	\$ 5,334	\$ 5,339	\$ 5,204
Total Non-Operating Revenues (Expenses)		\$ (1,948)	\$ 190	\$ (1,418)	\$ (999)	\$ (1,923)	\$ (4,365)
Capital and Op Fees, Cont, Grants							
Fees, Contributions, Grants		\$ 718	\$ 700	\$ 350	\$ 350	\$ 350	\$ 350
Operating Transfers		\$ 23					
Total Cap and Op Fees, Cont, Grants		\$ 741	\$ 700	\$ 350	\$ 350	\$ 350	\$ 350
Net Income		\$ 5,935	\$ (2,139)	\$ (2,018)	\$ 1,005	\$ 215	\$ 158

APPENDIX II – ACTUAL AND PROJECTED OPERATING CASH

Cash Flow (\$1,000s)	2011	2012	2013	2014	2015	2016
Beginning Balance	\$ 10,252	\$ 18,533	\$ 19,060	\$ 21,127	\$ 21,893	\$ 17,879
Additions to Cash						
Operating Revenues	\$ 162,481	\$ 167,664	\$ 172,267	\$ 175,771	\$ 178,258	\$ 179,815
Non-Operating Revenues	\$ 288	\$ 332	\$ 345	\$ 359	\$ 343	\$ 313
Fees, Contributions and Grants	\$ 709	\$ 700	\$ 350	\$ 350	\$ 350	\$ 350
Transfers from Bond Fund	\$ 38,914	\$ 15,842	\$ 10,686	\$ 32,038	\$ 28,389	\$ 21,238
Reimbursements and Other	\$ 4,296	\$ 4,296	\$ 4,296	\$ 4,296	\$ 4,296	\$ 4,296
Total Additions to Cash	\$ 206,689	\$ 188,834	\$ 187,945	\$ 212,814	\$ 211,637	\$ 206,012
Deductions from Cash						
Solid Waste Collection Contracts	\$ 87,623	\$ 92,562	\$ 92,241	\$ 92,099	\$ 92,012	\$ 91,126
Operations and Maintenance	\$ 35,264	\$ 45,001	\$ 44,128	\$ 45,265	\$ 47,275	\$ 48,933
CIP Expenditures	\$ 43,238	\$ 18,813	\$ 13,742	\$ 35,597	\$ 35,988	\$ 24,630
Taxes	\$ 19,457	\$ 23,102	\$ 24,197	\$ 24,970	\$ 25,134	\$ 25,284
Debt Service	\$ 6,946	\$ 9,039	\$ 10,284	\$ 12,497	\$ 13,937	\$ 16,504
Cash Funded LFC Operations	\$ 993	\$ 1,282	\$ 1,318	\$ 1,352	\$ 1,409	\$ 1,463
Total Deductions from Cash	\$ 193,522	\$ 189,800	\$ 185,910	\$ 211,781	\$ 215,754	\$ 207,940
Adjustments to Cash						
Accounts Receivable	\$ (5,197)	\$ (465)	\$ (391)	\$ (317)	\$ (218)	\$ (138)
Accounts Payable	\$ 311	\$ 1,957	\$ 423	\$ 50	\$ 321	\$ 159
Accounting and Technical						
Total Adjustments	\$ (4,886)	\$ 1,492	\$ 31	\$ (267)	\$ 103	\$ 21
Ending Cash Balance	\$ 18,533	\$ 19,060	\$ 21,127	\$ 21,893	\$ 17,879	\$ 15,972

APPENDIX III – COST ALLOCATION TABLES

	Cost Center	Description	Allocator
1	Residential Can Garbage Collection	Payments to residential garbage collection contractors	Direct Assignment
2	Recycling Collection	Payments to recycling collectors	Tonnage
3	Food and Yard Waste Cart Collection	Payments to collection contractors	Direct Assignment
4	Commercial / Multi Family Garbage Collection, Fixed	Fixed payment to contractors for commercial and multi family garbage collection	Direct Assignment/ Tonnage
5	Multi Family Garbage Collection, Variable	Variable payment to contractors for multi family garbage collection	Direct Assignment
6	Commercial Garbage Collection, Variable	Variable payment to contractors for commercial garbage collection	Direct Assignment
7	Clear Alley Program Collection	Payment to contractor for bag collection	Direct Assignment/ Rev Req
8	Multi Family Recycling Collection, Fixed	Fixed payment to contractors for multi family recycling collection	Direct Assignment
9	Multi Family Recycling Collection, Variable	Variable payment to contractors for multi family recycling collection	Direct Assignment
10	Commercial Food and Yard Waste Collection	Fixed payment for commercial food and yard waste collection	Direct Assignment
11	Recycling Processing	Payment to contractor for processing recyclables	Tonnage
12	Litter & Public Place Recycling Collection, Fixed	Fixed payment to contractor for public place collection	Tonnage
13	Litter & Public Place Recycling Collection, Variable	Variable payment to contractor for public place collection	Tonnage
14	Contract Commercial Food and Yard Waste Transfer	Cost of hauling commercial food and yard waste from the transfer stations to Cedar Grove	Tonnage
15	Contract Garb Transfer	Cost of transferring garbage at private transfer stations	Tonnage
16	Organics Processing	Payments to organics processor	Tonnage
17	Contracts Management	Costs of managing the city's collection, processing, and disposal contracts	Mgmt Estimates
18	Contract Implementation	Costs associated with implementing new programs under existing contracts (such as new recycling initiatives)	Mgmt Estimates
19	Collection Inspection	Costs of solid waste inspection program, which monitors both garbage and organics setouts and collections	Mgmt Estimates
20	RDS Material Loading	Costs associated with loading materials (including garbage, organics and other recyclables) into containers (for short haul to the rail yard or processors)	Tonnage/Ad Hoc

Cost Center	Description	Allocator
21 RDS Operations	Costs associated with city's two recycling and disposal stations (RDS) (excludes hazardous waste sites), including costs of the stations' grounds, facilities, tipping floors and scale houses as well as RDS administration costs	Tonnage/Ad Hoc
22 SPU Garbage Hauling	Costs associated with short haul of garbage from recycling and disposal stations to railhead	Tonnage
23 Recycling Hauling	Cost to haul self-haul recycling from stations to processors	Direct Assignment
24 Yard Waste Hauling	Cost to short haul yard waste from the recycling and disposal station to the organics processor	Tonnage
25 Equipment Maintenance	Cost of maintenance on hauling equipment	Tonnage
26 Disposal	Payments to Washington Waste Systems for rail hauling and disposal of residential, self-haul and commercial garbage	Tonnage
27 MRW General	Moderate Risk Waste (MRW). Local hazardous waste management (LHWMP) costs including community programs and LHWMP administrative costs, as well as costs associated with maintaining hazardous waste sheds.	Accounts/Ad Hoc
28 MRW	Cost of LHWMP green gardens and natural lawns programs	Accounts /Ad Hoc
29 Landfill O&M	Site maintenance costs, including equipment costs, for the Midway and Kent landfills	Direct Assignment
30 Customer Service and Billing	Costs associated with the call center, CCSS billing system, auditing and the utility service teams total costs are net of the City Light reimbursement	Mgmt Estimates
31 TSBS	Transfer station billing system costs.	Tonnage/Ad Hoc
32 Communications	Internal communications, community relations, public information, media relations, prog mgmt.	Accounts
33 G&A General	General and Administrative (G&A). Costs of the director's office, strategic policy, SEPA, human resources, information technology, finance, and city central costs	Rev Req Shares
34 Not in use		
35 Not in use		
36 Planning	Solid waste planning costs (e.g. data reporting and analysis, forecasting, long-term solid waste planning)	Tonnage
37 Waste Prevention and Recycling - General	Waste prevention efforts such as sustainable building and general solid waste reduction efforts	Tonnage
38 Waste Prevention and Recycling - Residential	Costs of the residential waste prevention and recycling program costs as well as costs associated with SPU's backyard composting and natural lawn care efforts	Tonnage/ Direct Assignment

Cost Center	Description	Allocator
39 Waste Prevention and Recycling – Commercial	Costs of the commercial waste prevention and recycling programs	Tonnage/ Direct Assignment
40 Clean City Programs	Cost associated with community cleanup, graffiti control, illegal dumping and litter pickup	Tonnage
41 Interest Expense	Interest payments on bonds	Tonnage
41 City and State Taxes	Payments of city B&O and state taxes	Rev Req
42 Non-Rate Revenues	Interest income, grants, and other miscellaneous revenues that reduce the total amount of revenue needed to be recovered through rates	Rev Req
43 Financial Requirements	Cash that must be raised to meet the SWF's financial performance targets	

APPENDIX IV – DEMAND ANALYSIS TABLES

Historic, Planned, and Projected Tonnage 2011-2012

	2011	2012 Rates	2012 (p)	2013 (p)	2014 (p)	2015 (p)	2016 (p)
Residential Garbage							
Can	65,249	62,279	64,041	61,934	57,229	54,181	52,133
Dumpster	47,622	46,474	46,622	46,192	45,522	44,825	44,406
Total	112,871	108,753	110,663	108,126	102,751	99,006	96,540
Residential Recycling							
Single Family	60,599	61,176	60,781	61,029	62,291	63,238	63,970
Multi-Family	19,928	19,942	20,486	21,061	21,729	22,433	23,020
Total	80,527	81,117	81,267	82,091	84,020	85,671	86,990
Residential Organics							
	79,809	75,912	81,046	82,265	85,712	87,850	89,467
Recycling and Disposal Stations (Self-Haul)							
Garbage	71,036	79,118	71,036	68,700	65,229	61,244	57,345
Organics	8,136	11,000	8,136	8,506	8,875	8,875	8,964
Commercial Garbage							
Contract	130,328	124,812	129,181	126,701	122,541	117,941	114,156
Non-Contract	5,033	5,033	5,033	5,033	5,033	5,033	5,033
Total	135,361	129,844	134,214	131,734	127,574	122,974	119,189
Commercial Organics (Contract)							
	2,680	2,474	2,680	3,000	3,275	3,524	3,316
Other							
CDL	113,608	139,047	113,608	113,608	113,608	113,608	113,608

APPENDIX V – RATE TABLES

RESIDENTIAL	2012	2013	2014	2015	2016
Garbage Can					
Micro Can	\$ 17.55	\$ 18.35	\$ 18.75	\$ 19.25	\$ 19.55
Mini Can	\$ 21.55	\$ 22.50	\$ 23.00	\$ 23.60	\$ 24.00
32 Gallon Can	\$ 28.05	\$ 29.35	\$ 30.00	\$ 30.75	\$ 31.25
64 Gallon Can	\$ 56.10	\$ 58.70	\$ 60.00	\$ 61.50	\$ 62.50
96 Gallon Can	\$ 84.15	\$ 88.05	\$ 90.00	\$ 92.25	\$ 93.75
Extras	\$ 8.60	\$ 9.00	\$ 9.20	\$ 9.45	\$ 9.60
Vacancy	\$ 6.85	\$ 6.85	\$ 6.85	\$ 6.85	\$ 6.85
Yard/Food Waste Can					
Mini Can	\$ 4.65	\$ 4.90	\$ 5.00	\$ 5.10	\$ 5.20
32 Gallon Can	\$ 6.95	\$ 7.30	\$ 7.45	\$ 7.65	\$ 7.80
96 Gallon Can	\$ 8.95	\$ 9.35	\$ 9.55	\$ 9.80	\$ 9.95
Extras	\$ 4.45	\$ 4.65	\$ 4.75	\$ 4.90	\$ 4.95
Uncompacted Dumpsters					
Account Fee	\$ 29.95	\$ 31.35	\$ 32.00	\$ 32.85	\$ 33.35
Pick-Up	\$ 23.20	\$ 24.25	\$ 24.80	\$ 25.45	\$ 25.85
Volume	\$ 17.80	\$ 18.60	\$ 19.05	\$ 19.50	\$ 19.85
Each Container, Weekly Pickup					
1YD	\$ 177.53	\$ 185.54	\$ 189.87	\$ 194.63	\$ 197.88
2YD	\$ 254.60	\$ 266.08	\$ 272.36	\$ 279.07	\$ 283.83
3YD	\$ 331.68	\$ 346.62	\$ 354.84	\$ 363.50	\$ 369.78
6YD	\$ 562.90	\$ 588.23	\$ 602.30	\$ 616.81	\$ 627.63
8YD	\$ 717.05	\$ 749.31	\$ 767.28	\$ 785.68	\$ 799.53
Compacted Dumpsters					
Account Fee	\$ 29.95	\$ 31.35	\$ 32.00	\$ 32.85	\$ 33.35
Pick-Up	\$ 23.20	\$ 24.25	\$ 24.80	\$ 25.45	\$ 25.85
Volume	\$ 36.15	\$ 37.80	\$ 38.65	\$ 39.65	\$ 40.25
Each Container, Weekly Pickup					
1YD	\$ 256.99	\$ 268.68	\$ 274.74	\$ 281.88	\$ 286.21
2YD	\$ 413.52	\$ 432.35	\$ 442.09	\$ 453.57	\$ 460.50
3YD	\$ 570.04	\$ 596.02	\$ 609.45	\$ 625.25	\$ 634.78
6YD	\$ 1,039.63	\$ 1,087.05	\$ 1,111.51	\$ 1,140.31	\$ 1,157.63
8YD	\$ 1,352.69	\$ 1,414.39	\$ 1,446.22	\$ 1,483.67	\$ 1,506.19
Miscellaneous					
Bulky/White Goods	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00
Curbside Electronics Recycling	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00
45 Gallon Bag	\$ 8.00	\$ 8.35	\$ 8.55	\$ 8.75	\$ 8.90
30 Gallon Bag	\$ 5.30	\$ 5.55	\$ 5.65	\$ 5.80	\$ 5.90
15 Gallon Bag	\$ 3.70	\$ 3.85	\$ 3.90	\$ 4.00	\$ 4.05
New Account Charge	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00
Detach Special % Premium	130%	130%	130%	130%	130%
Ancillary and Elective Services	See Separate Table				
Low Income Rate Assistance Credits					
SPU Billed can customers	50%	50%	50%	50%	50%
Fixed Credits					
Can	\$ 14.05	\$ 14.70	\$ 15.00	\$ 15.40	\$ 15.65
Food and Yard Waste	\$ 4.50	\$ 4.70	\$ 4.80	\$ 4.90	\$ 5.00
Dumpster	\$ 11.50	\$ 12.05	\$ 12.30	\$ 12.60	\$ 12.80

COMMERCIAL	2012	2013	2014	2015	2016
Dumpsters					
Account Fee	\$ 20.80	\$ 21.75	\$ 22.25	\$ 22.80	\$ 23.20
Pick-Up	\$ 13.50	\$ 14.10	\$ 14.45	\$ 14.80	\$ 15.05
Volume	\$ 22.90	\$ 23.95	\$ 24.50	\$ 25.10	\$ 25.50
Each Container, Weekly Pickup					
1YD	\$ 157.61	\$ 164.76	\$ 168.65	\$ 172.77	\$ 175.58
2YD	\$ 256.77	\$ 268.46	\$ 274.74	\$ 281.45	\$ 286.00
3YD	\$ 355.93	\$ 372.16	\$ 380.82	\$ 390.13	\$ 396.41
6YD	\$ 653.40	\$ 683.27	\$ 699.08	\$ 716.18	\$ 727.66
8YD	\$ 851.71	\$ 890.68	\$ 911.25	\$ 933.55	\$ 948.49
Compacted Dumpsters					
Account Fee	\$ 20.80	\$ 21.75	\$ 22.25	\$ 22.80	\$ 23.20
Pick-Up	\$ 13.50	\$ 14.10	\$ 14.45	\$ 14.80	\$ 15.05
Volume	\$ 46.50	\$ 48.65	\$ 49.70	\$ 51.00	\$ 51.80
Each Container, Weekly Pickup					
1YD	\$ 259.80	\$ 271.71	\$ 277.77	\$ 284.91	\$ 289.46
2YD	\$ 461.15	\$ 482.36	\$ 492.97	\$ 505.74	\$ 513.75
3YD	\$ 662.49	\$ 693.02	\$ 708.17	\$ 726.57	\$ 738.05
6YD	\$ 1,266.53	\$ 1,324.98	\$ 1,353.77	\$ 1,389.06	\$ 1,410.93
8YD	\$ 1,669.22	\$ 1,746.29	\$ 1,784.18	\$ 1,830.72	\$ 1,859.52
Drop Boxes					
Account Fee	\$ 98.40	\$ 98.40	\$ 98.40	\$ 98.40	\$ 98.40
Under 10	\$ 127.85	\$ 133.75	\$ 136.70	\$ 140.25	\$ 142.50
Pick-Up Over 10 Yd	\$ 171.60	\$ 179.50	\$ 183.45	\$ 188.20	\$ 191.20
Temp under 10	\$ 140.65	\$ 147.10	\$ 150.35	\$ 154.25	\$ 156.70
Temp over 10	\$ 188.75	\$ 197.45	\$ 201.80	\$ 207.05	\$ 210.35
Disposal	\$ 146.40	\$ 153.15	\$ 156.50	\$ 160.55	\$ 163.15
Cans (one container, weekly pick up)					
10-20 Gallon	\$ 26.00	\$ 27.20	\$ 27.80	\$ 28.50	\$ 28.95
32 Gallon	\$ 38.20	\$ 39.95	\$ 40.85	\$ 41.90	\$ 42.55
64 Gallon	\$ 74.55	\$ 78.00	\$ 79.70	\$ 81.75	\$ 83.05
96 Gallon	\$ 87.45	\$ 91.45	\$ 93.45	\$ 95.90	\$ 97.45
Miscellaneous					
Special Pick-Ups (% Premium)	130%	130%	130%	130%	130%
45 Gallon Bag	\$ 8.00	\$ 8.35	\$ 8.55	\$ 8.75	\$ 8.90
30 Gallon Bag	\$ 5.30	\$ 5.55	\$ 5.65	\$ 5.80	\$ 5.90
15 Gallon Bag	\$ 3.70	\$ 3.85	\$ 3.90	\$ 4.00	\$ 4.05
Bulky Waste Collection	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00
Extra Garbage (new in 2011)	\$ 8.60	\$ 9.00	\$ 9.20	\$ 9.45	\$ 9.60
Fee for Compostable Waste Drop I	\$ 73.25	\$ 76.60	\$ 78.30	\$ 80.35	\$ 81.65
Ancillary and Elective Services	See Separate Table				
Recycling and Disposal Station					
Garbage Per Ton	\$ 145.00	\$ 145.00	\$ 145.00	\$ 145.00	\$ 145.00
Garbage Flat Rate	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00
Charitable Orgs Per Ton	\$ 82.65	\$ 82.65	\$ 82.65	\$ 82.65	\$ 82.65
Yard and Wood Waste per Ton	\$ 110.00	\$ 110.00	\$ 110.00	\$ 110.00	\$ 110.00
Yard and Wood Waste Flat Rate	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00
Tires per load	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00
Appliances	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00
Railhead Rate Per Ton	\$ 93.60	\$ 97.90	\$ 100.05	\$ 102.65	\$ 104.30

Ancillary Services	2012	2013	2014	2015	2016
Deliveries/Pick-Ups/Swap-outs					
	\$ 21.50	\$ 22.50	\$ 23.00	\$ 23.60	\$ 24.00
	\$ 25.85	\$ 27.05	\$ 27.65	\$ 28.35	\$ 28.80
	\$ 34.50	\$ 36.10	\$ 36.90	\$ 37.85	\$ 38.45
	\$ 53.90	\$ 56.40	\$ 57.65	\$ 59.15	\$ 60.10
Pickup Ancillary Services					
	\$ 2.15	\$ 2.25	\$ 2.30	\$ 2.35	\$ 2.40
	\$ 6.40	\$ 6.70	\$ 6.85	\$ 7.05	\$ 7.15
	\$ 6.40	\$ 6.70	\$ 6.85	\$ 7.05	\$ 7.15
	\$ 4.30	\$ 4.50	\$ 4.60	\$ 4.70	\$ 4.80
Container Special Services					
	\$ 32.35	\$ 33.85	\$ 34.60	\$ 35.50	\$ 36.05
	\$ 43.10	\$ 45.10	\$ 46.10	\$ 47.30	\$ 48.05
	\$ 8.60	\$ 9.00	\$ 9.20	\$ 9.45	\$ 9.60
Compactor/Drop Box Special Services					
	\$ 36.60	\$ 38.30	\$ 39.15	\$ 40.15	\$ 40.80
	\$ 75.40	\$ 78.85	\$ 80.60	\$ 82.70	\$ 84.00
Other Ancillary Services					
	\$193.95	\$202.85	\$207.30	\$212.70	\$216.10
	\$ 64.60	\$ 67.55	\$ 69.05	\$ 70.85	\$ 72.00